IDENTIFICATION OF THE INITIAL CURRICULUM COMPONENTS FOR THE PREPARATION OF GRADUATE-LEVEL SUBSTANCE ABUSE COUNSELORS

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The purpose of this study was to identify the initial curriculum components necessary for the preparation of graduate-level substance abuse counselors. A review of the literature revealed that no agreed upon standards existed for the instruction of substance abuse counseling. This study employed a Delphi method to establish curriculum standards by (a) compiling a list of work behaviors associated with the practice of graduate-level substance abuse counseling and (b) selecting an expert panel to determine which items are most important for the preparation of graduate-level substance abuse counseling. A list of 198 work behaviors associated with graduate-level substance abuse counseling were generated from previously conducted task analyses. Following the procedures of the Delphi method, a panel of substance abuse counseling experts was selected and asked to respond to three administrations of an evolving questionnaire in order to establish consensus regarding which of the work behaviors were most important

for the preparation of graduate-level substance abuse counselors and which method of instruction was best suited for teaching each curriculum item. Twenty-eight of the 118 substance counseling experts contacted agreed to participate in the study. Expert panelists represented three distinct groups of nationally recognized substance abuse counseling professionals, substance abuse counselors, substance abuse counseling program administrators, and substance abuse counselor educators.

Following each iteration, mean scores of item ratings of importance were calculated and analyzed. Items with high mean scores were retained for the next round. Items with low mean scores were eliminated. The resultant findings of this study included a pared list of 89 curriculum items deemed to be the most important and the educational method judged to be best suited for the instruction of graduate-level substance abuse counselors. Finally, a post hoc multivariate of analysis (MANOVA) revealed no significant differences in ratings of importance among the different panelist subgroups, job classification, gender, educational level, percentage of education related to substance abuse counseling, and philosophy of treatment, thereby supporting consensus of opinion among expert panelists.

CHAPTER 1
INTRODUCTION

Professional counselors represent one of the fastest growing occupations in the helping professions. In 1974, studies estimated that approximately 70,000 individuals were working as professional counselors. By 1990, the number of those employed as counselors had spiraled to 176,000 (Nugent, 1995).

Historically, all counselors worked with a wide variety of people and problems. They were expected to be effective in all situations because they were "supposed to know about everything and do anything" (Vacc & Loesch, 1994, p. 95). Clearly, the ability to be clinically effective with all problems and with all people is a feat that even the most competent professional would find impossible to achieve. Recognizing this fact, counselors, like other professionals, have established areas of "specialization" for rendering unique services for distinct groups of individual problems (Sweeney, 1995).

Currently recognized counseling specialities include, but are not limited to, school counseling, counseling in higher education settings, marriage and family counseling, rehabilitation counseling, and mental health counseling. In order to insure the credibility and effectiveness of professionals practicing in each of these areas, standards of preparation have been established and are regulated by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) or the Council on Rehabilitation Education (CORE). CORE standards are very similar to and generally can be subsumed under the CACREP standards. Because rehabilitation counselors represent a

relatively small proportion of professional counselors, they will not be recognized separately here. Therefore, the vast majority of those who wish to obtain credentials in one of these counseling speciality areas are required to complete the mandatory curricular experiences established by CACREP.

The present study is concerned with the latest addition to the list of counseling specialities: professional substance abuse counseling. In January of 1995 the American Counseling Association (ACA), the organization representing most who identify themselves as professional counselors, officially recognized substance abuse counseling as a speciality. This recognition followed the rapid growth of membership in the International Association for Addictions and Offender Counslers (IAAOC), an organization for substance abuse counseling specialists within ACA, and the establishment of a specific certification by the National Board for Certified Counselors (NBCC) to recognize substance abuse counselors with graduate-level preparation (Sweeney, 1995).

Overview

Historically, there has been debate among counselors about the need for specialized training for those who help others with problems related to the nonmedicinal use of drugs. Some have suggested that personal recovery from an addiction is sufficient preparation (e.g., Banken & McGovern, 1992) or that general counselor training is adequate and that counseling specialities such as substance abuse counseling are unnecessary (Hosie, 1995). However, the literature reveals that specialities are needed (Blank, 1994; Finch & Crunkilton, 1979; Gartner, 1976; Hoberman & Malick, 1994; Sweeney, 1995); that counselors who receive specialized substance abuse training are more clinically effective

than their untrained counterparts (Lenhardt, 1994; McDermott, Tricker, & Farha, 1991; Page & Bailey, 1995; Scotch, Fleger-Berman, & Shaffer, 1997; Wheeler & Turner, 1997); and that neither general counseling preparation nor training solely in any of the other counseling specialities is sufficient to accurately assess and subsequently help clients with an alcohol or drug problem (Hser, 1995; Randolph & Davis, 1996; Rutter & Hagart, 1990; Watts, Trusty, Erdman, & Canada, 1996). Clearly, the most effective treatment of alcohol and other drug problems is provided by counselors who receive specialized substance abuse training. Taleff and Martin (1996) noted:

> Evidence is mounting that the better the training of the counselor is, the better the treatment outcome will be. Yet, even with an advanced degree, the literature supports the need for specialized and ongoing training for those that work in the area of chemical dependency. (p. 13)

Similarly, Stude (1990) wrote:

> To adequately fulfill these roles counselors must understand the multidimensional aspects of recovery from a lifetime of abusing substances. The counselor must also possess attitudes that facilitate rather than inhibit recovery. Specialization appears to be a necessity if clients affected by this problem are to receive the services they need.(p. 13)

In addition to the investigations which find substance abuse training to be clinically beneficial, there are others who have noted a significant increase in the demand for substance abuse counselor preparation. In fact, many have advocated for more and better trained substance abuse counselors due to the growing prevalence of substance abuse among Americans (Page & Bailey, 1995). For example, studies of adolescent behavior find a persistent increase among many young Americans' use of licit and illicit drugs, including alcohol, cocaine, hallucinogens, marijuana, methamphetamine, and tobacco (Barnes, Welte, Hoffman, & Dinstcheff, 1997; Brasseux, Dangelo, Guagliardo, & Hicks,

1998; Crowley, MacDonald, Whitmore, & Mikulich, 1998; Fields, 1998; Rouse, 1996). Other research reveals increasing use of cocaine and heroin among American adults (Greenblatt, 1997), and there is also evidence that a large number of elderly Americans are addicted to alcohol or prescription medication (Adams, 1992; Holroyd & Duryee, 1997; Zimberg, 1995).

Specialized training is also needed to provide contemporary substance abuse counselors with the knowledge and skills to meet the rapidly changing needs of the substance abusing population (Brown, 1993; Klee, 1990). In the past, addicted individuals exhibited maladaptive behaviors solely related to a substance abuse disorder. However, today's substance abuser is considerably different. Those with alcohol and drug problems are more likely to exhibit one or more mental health disorders in addition to a substance abuse disorder (Kelley & Benshoff, 1997). As a result, professionals have recognized the need for specialized training for substance abuse counselors working with "dually diagnosed" individuals. For example, Klee (1990) wrote:

> Unfortunately, traditional certification processes maintain a narrow perspective on the definition of pathology, recovery and the counseling process. A broader academic background is necessary, particularly for those working with the dually diagnosed. (p. 202)

Finally, professional substance abuse counselors require specialized preparation to meet successfully the various changes brought about by managed behavioral healthcare organizations. Under the current rubric, managed care organizations require the minimum of a master's degree for substance abuse counseling practitioners at agencies seeking third party reimbursement (Beinecke & Perlman, 1997; Taleff & Martin, 1996; Taleff & Swisher, 1997). As a result, substance abuse counselors can no longer rely upon a

baccalaureate degree or personal recovery from an addiction for job security. In fact, current studies show that employers at substance abuse treatment facilities are hiring more counselors who possess graduate degrees and fewer whose expertise is based solely on personal recovery (Brown, 1993). In addition, traditionally trained substance abuse counselors (e.g., having only on-the-job training or holding only a bachelor's degree) are also finding themselves ill-prepared to practice within a managed care environment. Counselors who received training based on long-term counseling approaches (such as the Minnesota Model) are unable to effectively conduct time-limited interventions or utilization reviews required of contemporary counselors working in managed care settings (Collins, 1995).

Theoretical Framework

It is widely known among educators that an effective curriculum is necessary to prepare competent professionals. It is also understood that pertinent and productive curricula are best established when they are based on a systematic and rational model. If no guiding model exists, curriculum development often results in content that is either incomplete, erroneous, or both. Unruh and Unruh (1984) warned, "Without a theoretical (model), curriculum development can produce piecemeal reforms, curriculum imbalance...and yield little or no understanding of the curriculum as a totality" (p. 95). In order to avoid such problems, academicians have constructed a variety of models to guide the processes of curriculum development. Each of these curriculum models, according to McDonald (1975), can be divided into three types: (a) control, (b) hermeneutic, or (c) critical. While support for each type of curriculum model has been

recorded in the literature, control models have been, in the past and present, the most widely implemented paradigms. The lasting popularity of these models in most likely due to the fact that they are founded on a linear framework, referred to as "technological rationality," which is used to develop pragmatic curricula that emphasize the importance of cognitive and behavioral task performance (Molnar & Zahorik, 1977). Over the years, many control models have been formulated. However, the model conceptualized by Tyler (1949) represents what some contemporary experts assert is the consummate curriculum theory. While Tyler's model is not a "conventional" theory, that is it is not one which makes predictions regarding curriculum, it is a model that when followed results in exceedingly effective curricula. In a book which described the leading curriculum models of American education, Ornstein and Hunkins (1998) wrote that Tyler's model represents a "rational, logical, and systematic" method for developing a highly pertinent and comprehensive curriculum in any academic subject. Tyler's model is grounded on four fundamental questions:

1. What educational purposes are to be attained?
2. What educational experiences can be provided to attain these purposes?
3. How can these educational experiences be organized?
4. How can it be determined whether these purposes are being attained?

Curriculum planners following Tyler's model collect data for determining objectives from three key sources: (a) learners, (b) those involved in contemporary life outside the school, and (c) subject matter specialists (Tyler, 1949). In order to develop a pertinent and comprehensive curriculum, data are gathered quantitatively from each of these groups

by administering work task analyses surveys and other measures (Wiles & Bondi, 1998). Using this "scientific and behavioral approach," curriculum designers advance through a step-by-step procedure that assures that the selection of educational experiences are accurately aligned with relevant curriculum objectives (Ornstein & Hunkins, 1998). Hence, Tyler's theory of curriculum design, (i.e., one that identifies and prioritizes educational objectives based primarily on work task behaviors identified by the learner, subject matter specialists, and other experts), represents the most sensible choice for those seeking to establish instructional activities that are most closely related to occupational competence.

Statement of the Problem

Considering the amount and legitimacy of the evidence supporting the need for specialized substance abuse training of graduate-level counselors, it might be assumed that standards for the preparation of these individuals have been identified and implemented. However, this is not the case. Although several work behavior analyses have identified the fundamental knowledge and skills needed to render competent substance abuse counseling, these efforts have not been translated into professional preparation curricula for substance abuse counseling. This is evidenced by the immense variation in curriculum content among substance abuse courses currently offered by "standardized" CACREP-accredited programs. Therefore, the problem to be addressed in this study is that the basic, preferred components of a specialized substance abuse counseling curriculum are unknown.

Need for the Study

Establishing a curriculum for the professional preparation of substance abuse counselors has implications for the theory, research, training and practice of counselors and counselor educators. The delineation of a professional preparation program would impact the field in several ways. First, specifying the curriculum components for the graduate-level training of substance abuse counselors will support the supposition that counselors, like other professionals, need to prepare specialists who can more effectively address the increasing number of complex client problems. As stated, some have argued that specialization is unnecessary because general training is sufficient for counseling substance abusers (Hosie, 1995; Hosie et al., 1990; Remley, 1995). However, most recognize that counselor specialization is needed to effectively manage the more involved problems often associated with several client populations, including substance abusers (George, 1990; McDermott et al., 1991; Morgan, Toloczko, & Comly, 1997; Page & Bailey, 1995; Taleff & Martin, 1996).

The findings of this study also will spawn additional research, the most notable being investigations that evaluate the effectiveness of the identified curriculum as well as those that determine who is best qualified to administer specialized substance abuse counselor preparation. After identifying the specific curriculum components for preparing professional substance abuse counselors, it also will be important to evaluate the degree of effectiveness of the curriculum to prepare professional substance abuse counselors. While the consensus of subject matter experts is a very reliable method for determining curriculum components, relating the curriculum to other methods of preparing and

recognizing professional substance abuse counselors could validate the efficacy of the curriculum. This could be achieved by examining how well each of the curriculum components aligned with evaluation procedures used by credentialing bodies to certify substance abuse counselors with graduate degrees.

In addition, the results of this study have ramifications for the practice of counselor education. For example, the development of a standardized curriculum would allow counselor educators to better prepare those working with substance abusers. According to Larson (1983), those who have been prepared in accredited programs following standardized curricula "tend to deliver adequate services with substantially more consistency" than those prepared in nonaccredited programs (p. 331). Therefore, rather than allow professors to select curriculum components subjectively, the preparation of professional substance abuse counselors would be guided by a standardized curriculum identified by subject matter experts.

And finally, results from this research will affect the future preparation and continuing education needs of counselor educators. For example, professors may find it necessary to obtain extra training in order to provide instruction based upon the specialized curriculum components identified in this study. Instructors not familiar with basic knowledge associated with substance abuse counseling, including but not limited to the pharmacological dynamics of recreational drugs; physiological; psychological, and social consequences of substance abuse; specific tests for assessing and diagnosing substance abuse disorders; and brief and time-limited substance abuse interventions, might require additional training to effectively prepare future counselors.

Purpose of the Study

The present study was undertaken to evolve a standardized curriculum for the specialized training of professional substance abuse counselors enrolled in counselor education programs. In particular, this study employed the Delphi method to identify specific curriculum components for the graduate-level preparation of professional substance abuse counselors by examining experts' opinions of substance-abuse-credentialed practitioners, program administrators, and academicians. The specific objectives of this study were to

1. Identify the initial curriculum components for the professional preparation of substance abuse counselors by examining the judgements of a panel of experts.
2. Determine the perceived level of importance for each educational component considered to be necessary for establishing a curriculum for the specialized training of substance abuse counselors.
3. Determine the optimal education method for teaching each retained curriculum component.

Rationale for the Approach

This research was conducted to identify the curriculum components for the specialized training of professional substance abuse counselors. There are numerous procedures for determining the content of a curriculum.. However, the Delphi method was selected for this study for a number of reasons. First, the Delphi procedure is one of the most commonly used and professionally accepted methods for determining curriculum content in higher education (Lewis, 1984). Many studies evidence the success of the

Delphi method for designing an academic program of study (e.g., Finch & Crunkilton, 1979; Walley & Webb, 1997; Winkle, Piercy, & Hovestadt, 1981).

Second, the Delphi procedure was chosen to avoid problems experienced by other curriculum researchers. In the past, curriculum developers have been criticized for basing education content on the judgments of a single group, such as administrators, academicians, or others (Wiles & Bondi, 1998). The Delphi method is a procedure for systematically gathering important information from individuals who have vastly different perspectives for solving a particular problem. Particular to this study, the Delphi method was used to gather information from a variety of professionals familiar with substance abuse counseling, including practitioners, program administrators, and academicians for specifying a specialized curriculum.

Third, the Delphi method features a three-stage process that has been used successfully to facilitate collective agreement among a diverse group of experts regarding the content of a curriculum (Lewis, 1984). Researchers indicate that the components for an effective curriculum are optimally specified when experts from different backgrounds dialogue and collectively determine the content (Wiles & Bondi, 1998). Therefore, in order to identify the most effective curriculum for preparing competent substance abuse counselors, the Delphi method was selected in order to reach consensus among a group of substance abuse counseling experts.

Research Questions

The research questions addressed in this study were as follows:

1. What specific curriculum components would substance abuse counseling

practitioners, program administrators, and academicians rate as most important for a specialized curriculum for preparing professional substance abuse counselors?

2. What method of instruction do substance abuse counseling practitioners, program administrators, and academicians judge to be best for teaching each curriculum component?

Definition of Terms

The following terms are defined as they apply to this study.

Counseling speciality refers to a narrowed area of counseling in which a differentiated and specific body of knowledge and expertise has been identified (Remley, 1995).

Curriculum is a specific set of instructional experiences that constitute an area of specialization (Wiles & Bondi, 1998)

Delphi method is a procedure for structuring the communication among a panel of recognized experts in order to systematically achieve consensus for resolving a complex problem (Linestone & Turoff, 1975). In a three round process, an identified panel of experts examine and evaluate a comprehensive list of possible solutions and in subsequent rounds members come to an agreement about which factors are most pertinent.

General practice counselor preparation represents the basic knowledge and skills required of a professional counselor and currently embodied by the community counseling degree (Sweeney, 1995).

Standards of preparation - are guidelines identified by a profession which ensure that instructional experiences provide students with the knowledge and skills necessary to perform effectively on the job.

Professional substance abuse counselor is an individual who has received at least a master's degree based on the knowledge and skills embodied in the eight CACREP "core counseling areas" and who has mastered a specialized body of knowledge and skills needed to execute effective prevention and therapeutic interventions aimed at reducing the physiological, psychological, and social problems brought about by the excessive use of psychoactive substances.

Overview of the Remainder of the Study

An introduction to the study has been presented in Chapter 1. A review of the literature pertinent to the study is presented in Chapter 2; the design, methodology and analysis are discussed in Chapter 3; and the results are presented in Chapter 4. A summary of the study and discussion of the results, implications, and recommendations is provided in Chapter 5.

CHAPTER 2
REVIEW OF RELATED LITERATURE

This chapter consists of a review of the literature relevant to the present study. Included are (a) support for the specialized preparation of masters-level substance abuse counselors, (b) support for the need for the study, (c) the theoretical model guiding the preparation of specialists. Finally, a summary of the purpose and function of the Delphi method provides support for the selected methodological approach.

Support for the Specialized Preparation of Substance Abuse Counselors

Even though numerous counseling specialities are recognized by counseling accreditation and certification bodies, some in the field suggest that a generalist training is adequate and that preparation and certification in speciality domains such as career, gerontological, and substance abuse counseling, are unnecessary. For example, Hosie (1995) stated:

> Some have contended that specialities are beneficial in providing services to specific client types. . . . [A]s someone familiar with training in counselor education, I conclude that. . . specializations are not necessary for employment and practice of master's level counselors. Specializations may be helpful to employers screening candidates, but may not be necessary for the competent practice of counseling. (p. 178)

Conversely, others declare that counseling is but one among many professions, including medicine, law, and engineering, that both recognize and endorse specializations beyond basic preparation (Myers, 1994). For example, medical graduates who complete standard

programs of study are designated "general practitioners." However, as the problems experienced by the public have become more complex and varied, and as the knowledge base has expanded, previous levels of competency have proven to be inadequate (Hoberman & Malick, 1994). Consequently, more narrowed and advanced curricula have been developed to effectively resolve modern difficulties through greater attention to detail. As a result, programs of study which concentrate on a particular service-recipient group or problem led to the development of specialty areas within many of the professions (Hughes, Thorne, Debaggis, Gurin, & Williams, 1973).

While there was initial resistance to specialization, it has clearly become widespread and standard practice among most professions. In fact, a review of the medical profession evidences how extensive specialization has become. Weschler (1970) wrote:

> Medicine is no longer a general field . . . . Evidence that medicine is divided into specialities is overwhelming. Over 83% of physicians limit their practice to a particular speciality. . . . Even the general practitioner of yesterday has become the family practice specialist. (p. 13)

Presently the American Medical Association (AMA) and the American Board of Medical Specialities (ABMS) recognize 23 medical specialities and numerous subspecialities, (Blank, 1994). Following the lead of the medical profession, other disciplines also have established specialties to meet the needs of increasing numbers of consumers who manifest an increasing variety of problems. For example, the American Bar Association (ABA), the governing body which guides the preparation and practice of lawyers, currently recognizes 14 legal specialities (American Bar Association, 1993). Sensing the need for expertise in a variety of media, engineers also have developed areas of

specialization. Beyond the basic education, these professionals can obtain specialized training and credentials in a number of areas including civil, computer, electrical, electronic, mechanical, and production engineering (Finnison, 1984).

Although considered by many to be a young profession, counseling too has recognized areas of expertise beyond the knowledge and skills required for general practice. Since 1981, CACREP has identified numerous specialities and subspecialities within the profession (Sweeney, 1995). In particular, CACREP outlines guidelines for five counseling specialities: community counseling, mental health counseling, marriage and family counseling, school counseling, and student affairs practice in higher education (Hollis, 1997). Similar to other professions, a number of subspecialities have been recognized within counseling speciality areas. For example, under the recommendation of CACREP, subspecializations in gerontological and career counseling are subsumed within community counseling programs (Sweeney, 1995).

Support for the Speciality of Substance Abuse Counseling

Although substance abuse counseling is a relatively new counseling speciality, the desire to help others with problems related to the abuse of psychoactive drugs is not a modern phenomenon. The literature reveals that healthcare professionals from a variety of disciplines have for years debated who is best qualified to work with substance abusers. While much has been learned from these discussions, the debate continues.

Currently, there is disagreement over the type and amount of training counselors need to work effectively with substance abusers. Some suggest that speciality training is unnecessary because a general counselor preparation is sufficient for those who render

service to alcohol or drug abusing individuals. In particular, Hosie, West, and Mackey (1990) asserted that a graduate degree in mental health counseling is sufficient for practice as a substance abuse professional. The observations made by Hosie and his colleagues are primarily based on the results of an earlier investigation in which they surveyed the opinions of 157 substance abuse treatment program administrators from across the country to determine the clinical effectiveness of generically trained counselors. The study revealed that a majority of the program administrators and directors surveyed believed that practitioners who held a "generalist" counseling degree were sufficiently prepared to work with substance abusers. Approximately 80% of respondents found generalist counselors to be competent in 14 of 16 knowledge areas, including the (a) twelve steps of Alcoholics Anonymous, (b) characteristics of substance abusers, (c) side effects of medications, (d) patterns of drug abuse, (e) strategies of relapse prevention, (f) application of behavior therapy, (g) assessment and diagnosis of substance abuse disorders, (h) use and effects of psychotropic drugs, (i) pharmacology of recreational drugs, (j) recognition and treatment of psychopathology, (k) use of Antabuse, (l) different needs of male and female clients, (m) characteristics of adolescent substance abusers, and (n) content of the DSM III. Administrators also indicated that generalist counselors were competent in 8 of 10 pertinent counseling skills, including (a) group therapy, (b) client staffing, (c) individual therapy, (d) intake interviews, (e) community education, (f) marriage and family therapy, (g) dual diagnosis, and (h) personality testing.

While the conclusions of Hosie et al. appear reasonable, a closer examination of the study reveals significant flaws. After reviewing the data included in the study, it could be

reasonably assumed that the administrators surveyed were rating how important they believed each of the knowledge and skill competencies were for counselors working at substance abuse treatment facilities instead of evaluating the competencies of employees. For example, knowledge competencies on which master's level counselors were ranked highest included familiarity with (a) principles of Alcoholics Anonymous, (b) personality and family characteristics of alcohol and drug abusers, and (c) adverse effects of alcohol and drugs. On the other hand, respondents ranked master's level counselors lowest on the knowledge domains on which they would be expected to demonstrate the highest level of expertise, including use of behavioral therapy, ranked 9, familiarity the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), ranked10, and recognition of and familiarity with psychopathology, ranked 12.

Further review of the literature reveals little support for Hosie et al.s' findings. Instead, a number of investigations conclude, contrary to Hosie et al., that generalist trained counselors are inadequately prepared to work with substance abusers. For example, Randolph and Davis (1996), like Hosie et al., surveyed administrators and directors working for a variety of mental health centers to rank which of 74 areas of training most related to the effective practice of master's level counseling, including but not limited to training and skills in substance abuse counseling, developmental psychology, abnormal psychology, personality theory, behavior modification, reality therapy, rational therapy, career counseling, individual therapy, group therapy, and crisis intervention. The participants were asked to use Likert-scale ratings for each training area with 1 representing high importance and 5 representing low importance. Analysis of the data

revealed that a mean score of 1.8 was associated with the need for "specialized training with alcohol abuse." This score clearly indicated that administrators in this investigation, unlike those in Hosie et al.'s (1990) study, believed that specialized substance abuse training is essential for those working with this population (Randolph & Davis, 1996).

Interestingly, administrators are not the only mental health professionals that claim specialized training is necessary for counselors to work effectively with substance abusers. Several studies find that counselors themselves believe that a generalist preparation is insufficient to provide substance abuse treatment. Wheeler and Turner (1997) administered a questionnaire to investigate the confidence of generically trained counselors to work with alcoholic clients. Surveys were mailed to 160 professional counselors who were identified as "being accredited and having substantial training and experience"(Wheeler & Turner, 1997). Of the surveys returned, 94 were found to be satisfactorily completed and were included in the study. A review of the findings revealed that the professional practitioners in this study did not consider training in general counseling to be sufficient for helping alcoholic clients. For example, half of those surveyed indicated they felt "de-skilled and incompetent" to provide substance abuse counseling. More importantly, 84% of the respondents indicated that they believed that specialized substance abuse training was essential for effectively working with alcohol abusing clients (Watts et al., 1996). The findings of the study led Wheeler and Turner (1997) to concluded that:

> [W]hat emerges from this research is that general counselors do not feel competent in working with people with drinking problems, [and] that some counselors decline to work with such clients. . . . Given the high incidence of alcohol abuse and the

> likelihood that all counselors will meet with alcohol problems, whether this is the presenting problem or not, there is a case for more alcohol training courses. (p. 325)

In a similar study, Watts, Trusty, Erdman, and Canada (1996) surveyed 212 randomly-selected, master's-level practitioners who were licensed in the state of Texas to determine how well their academic training prepared them to work as a professional counselor. Participants were asked to rate, using a 5-point modified, Likert scale with 1 representing strongly disagree and 5 as strongly agree, the effectiveness of their training in the following areas: (a) normal human development, (b) abnormal behavior, (c) use of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), (d) appraisal and assessment, (e) counseling theory, (f) group counseling, (g) crisis assessment, (h) research methods and statistics, (i) career counseling, (j) couple and family counseling, (k) counseling children, (l) consultation, (m) multicultural counseling, (n) substance abuse counseling, (o) treatment planning, (p) counselor supervision, (q) the counseling profession, (r) the development and maintenance of a private practice, and (s) legal and ethical issues. A review of the mean scores revealed that participants rated their preparation to be the most adequate in the areas of normal human development, abnormal behavior, assessment, group counseling, research methods and statistics, the counseling profession, and legal and ethical issues. Respondents indicated they were insufficiently trained about how to use the DSM-IV, how to develop and maintain a private practice, and most important for this study, how to perform substance abuse counseling. A mean score of 2.4 associated with substance abuse training indicated that practicing master's-level counselors in Texas disagreed with the findings of Hosie et al. (1990). Instead, they

indicated that their general counseling degree did *not* provide them with the knowledge and skills necessary to help those with alcohol and drug problems.

In addition to survey studies, several experimental investigations demonstrated that counselors who receive specialized substance abuse training are more effective than their untrained peers. For example, an investigation by Dahlhauser, Dickman, Emener, and Lewis (1984) revealed that helping professionals with substance abuse training can assess and diagnose psychoactive disorders more effectively than their untrained peers. The study compared the diagnostic abilities of counselors with substance abuse training to generalist-trained counselors. Analysis of 343 assessments revealed that the untrained counselor diagnosed only 10% of the individuals with substance abuse disorders correctly while the trained substance abuse counselor accurately assessed 60% of substance abuse problems.

In a similar investigation, Silverman, O'Neil, Cleary, and Barwick (1992) discovered that mental health professionals are in need of specialized training in order to more precisely assess and diagnose substance abuse disorders. Their investigation compared clinical assessments and diagnoses made by 55 mental health professionals to findings of an alcohol screening instrument in order to determine how well clinicians without specialized substance abuse training could recognize and diagnose alcohol-related disorders. The Michigan Alcoholism Screening Test (MAST) was administered to clients presenting at an outpatient clinic prior to being interviewed by one of the generalist-trained clinicians at the center. Clinical assessments and diagnoses were then compared with the findings of the MAST. It was found that alcohol abuse was overlooked by

clinicians in over a third of the cases which the MAST identified as problem drinkers (Silverman et al., 1992).

However, improvements in substance abuse counselor functioning are not limited to assessment and diagnosis. Other research shows that counselors receiving specialized substance abuse training are more clinically effective when compared to their unprepared counterparts. For example, after providing instruction and then testing a group of counseling students, Rutter and Hagart (1990) found that counselors who participated in a semester long training program on alcoholism interventions were not only more confident in their ability to work with substance abusers, but also exhibited improved clinical skills.

In a similar study, McDermott, Tricker, and Farha (1991) showed that counselors taking part in substance abuse training were significantly more knowledgeable about the dynamics of alcoholism counseling. In this study, counseling students were divided into two groups. One group received instruction about the dynamics of alcohol dependency and how to counsel alcoholics. The other group was provided with instruction on rational-emotive, cognitive-behavioral, and Rogerian counseling techniques. Those who received substance preparation scored significantly higher on an instrument designed to measure familiarity with knowledge and skills related specifically to substance abuse counseling.

The Increased Need for Substance Abuse Training

While the previous studies clearly indicate that substance abuse counseling is a counseling speciality and that specialized training improves clinical outcomes among alcohol and drug abusers, other investigations document an increased demand for

master's-level substance abuse counselor preparation. Recent research shows that better prepared substance abuse counselors are needed to meet the needs of the escalating numbers of substance abusers, to work with a growing number of substance abusers who have (an) additional mental disorder(s), and to satisfy the professional mandates required by managed care providers.

Escalating Incidence of Substance Abuse

In the past, a majority of the studies in the literature found that substance abuse and its associated problems were primarily associated with adolescents and young adults. Yet, many modern investigations find that the incidence of substance abuse among Americans has escalated dramatically among all age groups, including adolescents, adults and the elderly.

Adolescents. The early teenage years represent the developmental stage during which adolescents make the often troublesome transition from being a child into a young adult. Unfortunately, contemporary studies reveal that experimenting and using psychoactive drugs have replaced traditional methods for recognizing a child's passage into young adulthood (Butler, 1990; Newton, 1995). The popularity of this practice is evidenced by the ever increasing incidence of substance abuse among America's youth. For example, a study conducted at the University of Michigan in 1995 revealed that the use of illicit drugs (including marijuana, cocaine, and hallucinogens) among eighth, tenth, and twelfth graders increased significantly from 1991 to 1995. This particular study provided an exceptionally accurate description of current adolescent behaviors because data were compiled from completed surveys submitted by 50,000 students from across the

nation (Fields, 1997). Further evidence of increased drug use among adolescents is furnished by a 1996 study which surveyed over 18,000 participants residing within the borders of the United States. The National Household Survey on Drug Abuse (NHSDA) revealed that the proportion of 12-17 year olds using illicit drugs climbed from 5.3% in 1992 to 9.0% in 1996. In particular, the use of contemporary hallucinogens, including mushrooms, ecstacy, and LSD, has doubled among this age group since 1994.

Increased use of illegal drugs by American youth is certainly a serious problem, however, the incidence of alcohol and tobacco use, two of the most potentially addictive and destructive drugs, by this group is even more alarming. The same household survey revealed that approximately 9 million teenagers consumed alcohol and of these, 4.4 million were considered to be binge drinkers (Substance Abuse Mental Health Service Adminstration, 1997). Just as disturbing, the same study found a statistically significant increase in cigarette smoking among youngsters in 1997 compared to those responding in 1996. In 1997, 4.5 million adolescents aged 12-17 were found to be daily cigarette smokers.

Adults. Adolescents are not the only group experiencing substance abuse problems. Traditionally, the use of alcohol and tobacco have chiefly been associated with American adults. It comes as no great surprise that they also account for the largest number of psychoactive substance abusers and dependents in the country. However, in recent years members of the general population have become increasingly aware of the overwhelming costs society bears for the abuse of these socially sanctioned substances. Unlike previous generations, a majority of the adult population today is acutely aware of overwhelming toll

exacted by substance abuse, including the vast number of alcohol-related automobile crashes that result in the permanent disability or death of literally thousands of Americans annually, the physical and psychological trauma inflicted by drug using perpetrators of domestic violence, the immense economic costs due to reduced occupational productivity, and the need to build more jails to hold the ever-increasing number of individuals incarcerated for alcohol and drug offenses. Unfortunately, increased recognition of substance abuse problems has done little to change the behaviors of many American adults. In fact, recent research indicates that the use of several drugs by this age group is dramatically increasing. Modern hospital reports reveal that cocaine use is mounting among those age 35 and over. Records kept by the Drug Abuse Warning Network (DAWN) reveal that cocaine use, which accounted for 19% of the emergency room admissions for 35-54 year olds in 1990, had risen to over 40% by 1995 (DAWN, 1996). Moreover, the same report found that emergency room episodes related to heroin abuse by adults had nearly tripled from roughly 15,000 admissions in 1990 to 40,000 in 1996 (DAWN, 1996).

Regrettably, increased prevalence is not limited to illegal drugs. The incidence of legal drug abuse in this group has increased as well. While cigarette smoking among adults has stabilized over the past several years, excessive use of alcohol, in particular binge drinking, has reached ever increasing levels. A study which defined binge-drinking as consuming five or more drinks within two to three hours found a 40% increase in the amount of binge-drinking among individuals over 35 years old in 1996 compared to 1991 (National Institute on Drug Abuse, 1996). And even though most of these individuals

will not become addicted to beverage alcohol, increased rates of alcohol consumption inevitably lead to an even greater incidence of alcohol-related psychological and social problems including but not limited to suicide, rape, domestic violence, and automobile crashes.

The elderly. While research indicates that use of illicit drugs typically decreases with age, abuse of legal drugs including alcohol, prescription medications, and over the counter medications remain a serious problem for many older Americans (Doweiko, 1995). Similar to adolescents, those over the age of sixty-five are faced with and must come to terms with a number of difficult developmental challenges. For example, more often than not, retirement is accompanied with a decline in self-concept. Leaving the world of work brings feelings of meaninglessness and unworthiness for those whose who do not sufficiently readjust their self-image and instead continue to base their self-concept solely on occupational performance and the ability to be a "provider." More important, the once active and socially involved individual may find himself or herself isolated from others due to the loss of hearing, sight, and/or mobility. Further isolation is experienced by this age group when those who comprise an individual's circle of support, including spouse, relatives, colleagues, and friends, begin to die leaving the older individual socially unconnected. Unfortunately, individuals who are unable to productively negotiate these situations often become despondent and frequently rely on psychoactive substances for solace. Zimberg (1995) noted:

> These stresses can often lead to the development of clinical depression, which is often unrecognized as a treatable condition, but rather as a result of getting old. This depression can become another source of dysfunction and stress. People adjust

> to these stresses in a variety of ways. Increasingly older people will turn to alcohol to feel better or escape these problems. (p. 419)

Although it is clear that these and other problems can invoke use of alcohol and other drugs, not until recently has the extent of drug abusing behavior among this population been ascertained with any degree of accuracy. Over the years, a number of investigations have attempted to assess the incidence of substance abuse among the general population of those sixty-five and older. The general consensus among those surveyed was that problems related to substance abuse occurred in only a small percentage of elders (Atkison, 1984; Maddox, 1988; Stephens, Haney, & Underwood, 1982). However, it is worthy to note that these findings were based entirely on data gathered from self-report surveys. In recent years, research which used less subjective methods for gathering data shows that the incidence of substance abuse among elders is much more prevalent than was previously indicated. For example, a study which reviewed the admissions of a representative number of hospitals revealed that the number of admissions for alcoholism or alcohol-related conditions and the number of admissions for heart attack among older Americans were equal (Zimberg, 1995). In a similar study, Adams, Magruder-Habib, Trued, and Broome (1992) reviewed emergency room admissions and found that 30% of the presenting problems of individuals 65 and over were alcohol-related.

While both of the previously discussed investigations demonstrate that a significant level of alcohol abuse exists among seniors, it is not the only drug abused by this population. A report issued by the National Institute on Drug Abuse (NIDA) examined emergency room admission data from hospitals across the nation and discovered that 25%

of admissions among the elderly resulted from the abuse of prescription drugs (National Institute on Drug Abuse, 1996).

Additionally, Holroyd and Duryree (1997) found that 11.4% of the elderly presenting for services at an outpatient psychiatric clinic were benzodiazepine dependent. Even though these studies clearly illustrate the alarming prevalence of elder substance abuse, the most compelling evidence of the severity of substance abuse among the elderly arises from a two-year analysis which was conducted by the Center for Addiction and Substance Abuse (CASA) and presented to Congress in June of 1998. Analysis of a survey completed by over 400 randomly selected primary care physicians revealed that of the 25 million women aged 59 and older, 1.8 million abuse or are addicted to alcohol and an additional 2.8 million are abusing or addicted to prescription drugs (CASA, 1998).

The increasing incidence of substance abuse among all Americans revealed in contemporary studies clearly substantiates the heightened demand for substance abuse counselors. Therefore, more opportunities are needed for preparing these professionals to handle alcohol and other drug problems effectively.

Increased Prevalence of Dual Disorders

An increased demand also exists for substance abuse counselors who are sufficiently trained to work with those diagnosed with both a substance abuse disorder and a co-existing psychiatric disorder. Traditionally, substance abuse professionals have provided services only for individuals diagnosed substance abuse disorders while generically trained mental health professionals have rendered services to those with psychiatric conditions other than substance abuse, such as mood, anxiety, and psychotic disorders (Banken &

McGovern, 1992; George, 1990). However, recent studies indicate that this pattern is rapidly changing. Research reveals that an escalating number of clients manifest both a mental disorder and substance abuse disorder. Fowler, Carr, Carter and Lewin (1998) interviewed 194 individuals who were receiving treatment for schizophrenia from an outpatient clinic to determine the presence of additional substance abuse disorders. Data gathered from the participants revealed that 26% manifested a substance abuse disorder within the previous six months while 60% had been diagnosed with a substance abuse disorder at some point in their lifetime.

Lehman, Myers, Corty, and Thompson (1994) examined 435 individuals consecutively admitted to a psychiatric hospital for mental illness to determine whether they also manifested a co-existing substance abuse disorder. Participating clinicians used the DSM-IV to assess the presence of alcohol or other drug problems and found that the majority of these individuals, some 56%, met the criteria for a substance abuse disorder in addition to a presenting mental disorder.

Finally, Regier, Farmer and Rae (1990) examined over 20,000 individuals who were receiving clinical treatment in general psychiatric settings to ascertain the prevalence of co-existing substance abuse disorders. The resulting data showed that 33% of these exhibited a psychoactive substance disorder in addition to a mental health disorder. Particularly important, Regier et al., (1990) found that approximately half of those diagnosed with a schizophrenic disorder also exhibited symptoms associated with a substance abuse disorder.

Over the years, mental health professionals working with this population have discovered that conjoint rather than separate treatment of dual disorders is necessary for positive therapeutic outcomes. Drake, Muesser, Clark, and Wallach (1996) wrote:

> Ten years ago, the only treatment options available for people with co-occurring substance abuse and severe mental illness were parallel treatments in separate programs. These efforts were often uncoordinated and ineffective. . . . Over the past ten years, programs that integrate substance abuse and mental health treatments have been rapidly emerging. Initial evidence indicates that integrated treatments, if consistently applied, are quite effective. Clients in integrated treatment programs achieve remission or recovery from substance abuse at a more rapid rate than would be otherwise expected and experience improvements in other outcome domains correlated with substance abuse. (p. 49)

Professionals therefore have concluded that counselors working with this population are in need of additional training. Specifically, conventionally trained substance abuse counselors (i.e. those without formal training) lack the knowledge and skills necessary to work effectively with dually diagnosed clients, leading several authors to recommend that substance abuse counselors should be required to complete specialized preparation programs in formal academic institutions (Kelley & Benshoff, 1997; Miller, 1995; Scott, 1991). In particular, Klee (1990) wrote:

> The training and education of the addiction counselor needs to be regulated and formalized. A broader academic background is necessary, particularly for those working with the dually diagnosed. . . .The best way to achieve this goal is to move the training an education into a formal academic curriculum. Colleges and universities have the facilities and access to expertise to provide a full range of academic training. (p. 202)

Negotiating the System of Managed Care

Significant changes within the profession have also heightened the need for the specialized training of substance abuse counselors. The emergence and proliferation of

managed behavioral health care organizations within the last ten years has placed unprecedented demands on those who provide service to substance abusers. Rivers (1998) surveyed a number of substance abuse program administrators and found that over 55% had implemented clinical program changes in response to strictures implemented by a managed care organization. Changes included a shift from less inpatient treatment to more outpatient counseling with an increased emphasis on group work, brief treatment, and crisis stabilization.

While not all counseling programs have been influenced by the mandates of managed care, many predict that managed care companies will govern the provision of all mental health and substance abuse services within the next ten years (Beinecke & Perlman, 1997; Minkoff & Pollack, 1997; Schuster, 1997). In order to survive these changes, substance abuse counselors find it necessary to obtain graduate training for a number of reasons. First, managed care organizations require counselors to hold a master's degree or greater for third party reimbursement (Brown, 1993). Managed care companies maintain that master's-level practitioners possess the minimal knowledge and skills necessary to provide prudent and effective counseling services (Schuster, 1997). These health care groups have also asserted that substance abuse counselors who lack formal training are less able to assess, develop, and implement treatment that addresses unique needs of each client, including co-existing psychiatric disorders; therefore, they provide treatment that is largely unsuitable and ineffective (Taleff & Swisher, 1997).

Second, experts in the field have noted that substance abuse professionals educated prior to the advent of managed care are not sufficiently prepared to work within the new

environment and need additional training in brief and time-limited counseling approaches (Alperin & Phillips, 1997). The emphasis of managed care organizations for counseling approaches that provide the most effective care in the least amount of time has resulted in the development and adoption of brief and time-limited counseling approaches and the abandonment of long-term abstinence models of treatment, such as the Minnesota Model (Collins, 1995).

Finally, substance abuse counselors working within a managed care setting are, as never before, accountable for treatment outcomes. The modern substance abuse counselor is required by managed care organizations to evaluate the effectiveness of their services empirically. Some have suggested that graduate-level preparation is necessary for counselors who are required to perform the complex task of determining treatment outcomes. Tarleff (1997) stated:

> In this day and age of managed care and accountability, treatment outcome is becoming essential. The master's-level student who has been versed in research design is in a prime position to perform this task. . . . In short, the master's level alcohol and drug therapist would have the ability to pose research questions and problems, be able to examine the range of available modes of inquiry, define the population, identify a data collection strategy, analyze and data, and draw conclusions. . . . (p. 10)

With each of these issues in mind, it is incumbent upon counselor educators to identify the curricular experiences that would best prepare substance abuse counselors for practice in a managed care setting.

Support For The Need For The Study

As indicated, a strong need exists for the specialized preparation of graduate-level substance abuse counselors. Scholars have observed that substance abuse counseling has

undergone tremendous growth in the last few years. Page and Bailey (1995) noted that, "addiction counseling is becoming a lucrative field and addiction counseling certification will be increasingly sought by mental health counselors, counselors who work in criminal justice, and counselors who work in private practice" (p. 167). As the demand for substance abuse counselors increases so does the demand by professionals and the public for determining the minimal training standards for preparing these counseling specialists (Kolpack, 1992).

Over the years, many different empirical investigations have undertaken the important task of identifying the knowledge and skills necessary for training and credentialing substance abuse counselors. However, the most valid and reliable studies have been those based upon a work behavior analysis. The Littlejohn Report (1974) was the first significant attempt to identify the counseling work behaviors of professional alcoholism counselors. Littlejohn's work was monumental in that it was the first study to distinguish the unique knowledge and skills of the professional alcohol counselor from those of other mental health professionals, (e.g., psychiatrists or psychologists), as well as volunteers from Alcoholics Anonymous. The study identified twenty-two work tasks specific to alcoholism counseling, including but not limited to intake assessment, crisis intervention, individual and group counseling, prevention, and program development (Institutes of Medicine, 1990).

Later, a national movement to create standards for credentialing both alcohol and drug counselors led Birch and Davis (1984) to conduct a work behavior (task) analysis of substance abuse counselors from across the nation. A review of the literature and the

recommendations of a panel of experts was used to develop a group of 187 specific substance abuse counseling work tasks which were included on a survey that was completed by over 400 alcohol and drug specialists. Analysis of the survey data revealed what has been recognized as the "12 core functions"of an alcohol and drug counselor (Von Steen, 1996; Institute of Medicine, 1990). The core tasks identified included: (1) screening, (2) intake, (3) orientation, (4) assessment, (5) treatment planning, (6) individual, group, and family counseling, (7) case management, (8) crisis intervention, (9) client education, (10) referral, (11) reports and record keeping, and (12) consultation with other professionals. In general, substance abuse counseling professionals accepted these findings and integrated them into local and state training and certification programs. Most notably, the 12 core functions served as the foundation for National Association for Alcohol and Drug Abuse Counselors (NAADAC) credentialing examination (Banken & McGovern,1992).

Unfortunately, both the Littlejohn Report and the study of Birch and Davis (1984) were based upon the work behaviors of counselors without formal training and thus resulted in state and national credentials which could be obtained by individuals who did not have a high school diploma (Page & Bailey, 1995). While these guidelines and credentials sufficiently served the profession for years, new standards for certification became necessary as managed care organizations began to require a master's degree for third party reimbursement. Subsequently, contemporary substance abuse counselors needed a credential that acknowledged graduate-level preparation. In response, the National Board for Certified Counselors (NBCC) and the National Association for

Alcohol and Drug Abuse Counselors (NAADAC) worked jointly to develop a specific credential for substance abuse counselors with a post-baccalaureate degree, the Master of Addictions Counselor (MAC) certification. The MAC includes an examination based on a job analysis that examined the work behaviors performed by substance abuse counselors who held at least a master's degree that included specific training for the prevention and treatment of addictions. Participants included educators, administrators, counselors and supervisors. The findings revealed 73 tasks distinct to graduate-level substance abuse counselors. These tasks were subsequently categorized into five areas: practice, implementation, orientation, assessment, and prevention (T. Clawson, personal communication, June 17, 1998).

Surprisingly, the information obtained from these and other studies has not led to a standardized curriculum for the preparation of substance abuse counselors. Instead, a great deal of disparity exists among programs that prepare counselors. While these studies have identified the competencies expected of a substance abuse counseling professional, there is little agreement as to the curriculum experiences that would most effectively impart the requisite knowledge and skills to counselors in training. Lawson and Lawson (1990) observed that among university training programs for substance abuse counselors, "there is little consensus about prerequisites, course curriculum, or teacher qualifications" (p.38). In a study of counselors in training, McDermott (1991) concluded similarly, and wrote:

> The important issue of alcoholism is inadequately acknowledged in the academic preparation of the counselors who work with these problems. Very little exists to date on curricula, outcomes or efficacy of preparing counselors-in-training to assess or treat the alcohol or drug addicted client (p. 87).

In order to further investigate these conclusions, Morgan et al., (1997) examined the current state of graduate-level substance abuse counselor preparation opportunities. In particular, the authors surveyed counselor education programs accredited by CACREP to determine the state of substance abuse training among "quality controlled" graduate schools. Seventy CACREP approved programs were investigated to determine the number and type of substance abuse courses offered, the requirements of each course, and what, if any, textbook(s) was (were) required for each course. The study revealed that 21% required courses in substance abuse counseling and 77% provided elective courses related to substance abuse counseling. When combined, these statistics indicate that 98% of CACREP approved programs are committed, to some degree, to providing substance abuse counselor preparation. However, even though most graduate programs provide substance abuse counselor preparation opportunities, Morgan's study indicates there is little consensus regarding curriculum content. For example, 57% of those surveyed offered courses that focused primarily on counseling skills specific to substance abusers. Included in these courses were assessment, diagnosis, individual and group interventions, and relapse-prevention. Conversely, 28% provided what was termed "drug overview" courses. Instead of counseling skills, these classes provided basic instruction on drug types, pharmacology, and models of addiction. The remaining programs offered courses that emphasized early prevention strategies. The high degree of variability among counselor education programs regarding substance abuse preparation led the authors to conclude that "CACREP still has no speciality standards for competent, addiction-related training [and] this lack of standards should be corrected" (Morgan et al., 1997, p. 67).

Support for the Theoretical Model

Over the years, American educators have struggled to find the best method for identifying and organizing instructional components for the most productive curricula. Early on, college curricula were organized around the "classics" (e.g., Greek literature, Latin, and algebra) because professors held that the classics were difficult subjects to master and the more difficult the subject, the more the student studied, and the more the student studied, the greater his or her intellectual capabilities were believed to be (Ornstein & Hunkins, 1998). As time passed, other subjects that were deemed appropriate, based solely on the subjective opinions of the professors who taught the courses, were added to the curriculum. The unsupported and arbitrary manner in which extra subjects were included in the curricula led to a great deal of pedagogical chaos (Tanner & Tanner, 1975). Inquiries into the relevance of the additional curriculum components were posed with increasing frequency. Additionally, many were troubled by the apparent lack of uniformity when the curricular content of similar programs of study was compared among different schools (Ornstein & Hunkins, 1998).

In order to resolve these difficulties, academicians developed numerous theories for guiding curriculum development, including but not limited to systematic, structural, reconceptionist, and reflective models (Ornstein & Hunkins, 1998). However, McDonald (1975) declared that the large number of curriculum theories can be categorized into one of three types: (1) control, (2) hermeneutic, or (3) critical.

According to Molnar and Zahorik (1977), control theories are those that are most concerned with the scientific determination of education experiences most effective for

improving the student's cognitive and behavioral performance. In general, control theories are based on a linear framework that follows a logical, step-by-step procedure in order to quantitatively identify and verify both curriculum objectives and content. For example, curriculum designers using a control model approach might use an activity or job analysis to identify precisely those behaviors most related to the topic of the course.

The hermeneutic curriculum model, on the other hand, focuses on the meaning behaviors have for the student rather than the student's ability to perform them. In fact, those employing this model would most likely be inclined to forego practical educational considerations in order to examine and formulate a curriculum from a philosophical standpoint which promotes new ideas and perspectives among learners. Therefore, following hermeneutic models, curriculum objectives and content would be selected base on how well they help students find personal meaning for their perspective life experiences (Molnar & Zahorik, 1977). For example, a curriculum existentialist, Kneller (1971), suggested that the consummate curriculum would provide a great deal of time for "personal introspection" and "social problem solving" so the student could "find the real meaning of himself" (As cited in Tanner and Tanner, 1975, p. 93).

The critical curriculum model is the third and final type identified by McDonald. The critical model attempts to bridge the gap between hermeneutic and control models by reflecting on the social, political, and economic influences upon the curriculum. According to Ornstein and Hunkins (1998), curriculum planners following this type of model often express a desire to "free people from a capitalist system where they strive to obtain meaningless certificates to the point of ignoring intellectual development. For

instance, students are more concerned with grades than accumulating meaningful knowledge" (p. 164). To circumvent this cultural dilemma, critical theorists urge curriculum designers to create curricula that help students become more aware of the workings of and the problems associated with their socioeconomic environment. Such a curriculum, they postulate, would necessarily help the student develop knowledge and skill competency, not just for obtaining a good paying job, but instead for solving the difficulties facing a majority of the people on the planet, such as poverty and social oppression (Kemmis & Fitzclarence, 1986).

Theories from each of the previously discussed areas have, at one time or another, received support from various curriculum planners and educators. Conversely, each of the curriculum models have also been criticized. However, of the three, criticisms of hermeneutic and critical models have clearly been the most skeptical and pejorative. For example, Molnar and Zahorik (1977) acknowledged the weaknesses of the hermeneutic model when they wrote:

> Hermeneutic theory has been criticized . . . because it generally does not deal with practice, it has been criticized as a being an intellectual exercise. It has also been criticized for . . . providing an analysis of what is wrong with current conceptions of the curriculum without suggesting what direction the curriculum ought to take. (p. 6)

Others insist that the hermeneutic model is an overly esoteric approach that is neither realistic nor functional. Tanner and Tanner (1975) asserted that a curriculum approach that refrains from including scientific subjects in favor of those that solely promote personal introspection are faced with "enormous practical problems" because it

diverts attention away from pragmatic needs to an "anxious preoccupation with the unrealities of a purely inner life." (p. 92).

Objections to the critical model of curriculum design are also well documented in the literature. In particularly poignant review, Ornstein and Hunkins (1998) stated that the attempts of critical theorists to identify and design curriculums based on social change have resulted in "a watered down curriculum with a lack of direction and focus" (p. 39).

Not surprisingly, curriculum scholars have noted that critical theories in general have not been widely accepted among the majority of American educators. Olivia (1992) observed, "With its heavy emphasis on controversial social issues and its major premise to make schools the primary agency for social change, [critical theory] . . . has not made great inroads into the schools of the United States" (p. 195).

On the other hand, control theories, while not totally free of shortcomings, have been deemed more effective, and consequently are favored over other curriculum models. Ornstein and Hunkins (1998) proclaimed that despite criticisms that suggest control theories are overly rigid, "the school of curriculum theorizing [that] has been dominant for most of this century . . . has relied primarily on quantitative inquiry" (p. 295). They go on to note that,"most people in the field [of education] . . . believe that empirical-analytic and scientific approaches contribute the most to the field of curriculum development" (p. 45). While many educational specialists have developed curriculum models that have been designated as control theories, including those designed by Bobbit (1924), Charter (1923), and Popham (1970), the model that is by far the most widely-known and accepted is the one initially conceived by Tyler (1949). After reviewing a variety of curriculum theories,

Olivia (1992) concluded that:

> The best or one of the best known models for curriculum development with special attention to the planning phases is Ralph Tyler's in his classic book, *Basic Principles o f Curriculum Instruction.* The "Tyler Rationale," a process for selecting educational objectives, is widely known and practiced in curriculum circles. (p. 164)

Ornstein and Hunkins (1998) provided further testimony regarding the eminence of Tyler's work when they stated that

> [T]he *Basic Principles of Curriculum Instruction. . .*which has gone through 35 printings, is considered by some as a "mini-Bible" of curriculum. . . . The Tyler model depicts a rational, logical, and systemic approach to curriculum making . . . which has been utilized and adapted by many curricularists. (p. 79)

These comments make clear that Tyler's model has been widely used and accepted. However, they do not tell us precisely why his model has remained popular for many years. It is likely that Tyler's model for curriculum development prevails because it is a pragmatic, straightforward approach that allows academicians to develop curricula that are relevantly aligned with cognitive and behavior performance competencies. What's more, the model has been proven to be effective with most subject areas, including those in the hard sciences as well as the humanities (Ornstein & Hunkins, 1998).

According to Tyler (1949), four fundamental questions guide the development of effective curricula.

1. What educational purposes should the school seek to attain?
2. What educational experiences can be provided that are likely to attain these purposes?
3. How can these educational experiences be organized?

4. How can we determine whether these purposes are being attained?

Before each of the aforementioned questions is examined more closely, it is important to note that the present study is confined to the identification and arrangement of objectives and learning experiences in order to establish a standardized curriculum for preparing substance abuse professionals and as such will be limited to the first three inquiries of the model. Inasmuch as Tyler claims that pedagogical effectiveness can be determined only by measuring the cognitive and behavioral performance of students *after* they have received instruction, it is clear that the intent of question four is beyond the scope of the present study.

The purpose of Tyler's first question is to focus consideration on what specific objectives should be included in the proposed curriculum. It has been suggested that the process of identifying clear and concise educational objectives provides the foundation on which the rest of the curriculum is constructed (Taba, 1962). More important, Tyler believed that curriculum objectives should be based on empirically-derived data rather than rely on the subjective opinions of individual academicians. Collecting information through the use of surveys and other scientific measures would decrease the chance that irrelevant goals would be included and increase the probability that only the most pertinent objectives related to the chosen subject would be selected. Following Tyler's model, data for determining objectives are gathered from three key sources: (1) the learner, (2) those involved in contemporary life outside the school, and (3) subject matter specialists (Tyler, 1949). Data are gathered quantitatively by administering surveys, task analyses, and other measures to those in each group. More often than not, this process results in a vast

number of cognitive and behavioral objectives which must be screened and prioritized based on educational importance. Tyler (1949) stated:

> Data obtained from the three sources. . . provide more (objectives) than any school should attempt to incorporate into its educational program. A smaller number of consistent and highly important objectives need to be selected. . . It is essential to select only the number of objectives that can be attained to a significant degree in the time available and these must be the really important ones (p. 33)

After screening and ranking the objectives, the curriculum planner can turn attention to Tyler's second question and determine what learning experiences are most useful in obtaining each objective. Tyler (1949) delineated four types of learning experiences in his model. However, of these, only two pertain to the graduate-level curriculum in this study, including (1) learning experiences to develop skill in thinking, and (2) learning helpful in acquiring information.

According to Tyler, there are many different ways of "thinking," including the inductive, deductive, and the logical. Inductive thinking is defined as the process by which generalizations are drawn from several items of information. Deductive thinking is interpreted as the application of a generalization to a specific case. Logical thinking is concerned with the organization of premises, assumptions, and conclusions for developing a rational argument (Tyler, 1949). Tyler contended that the learning experiences that best facilitate objectives related to "thinking skills" are based on "real-life activities" and should not rely on questions on which can be easily referenced in a course textbook. Instead, he asserted that

> [T]he learning experiences to develop these types of thinking should be. . . based upon exercises in problem-solving that are real to the student . . .and are set up in the environment in which the problems usually occur. It is obvious

> that the student learns through experience . . . (and) not when the teacher does the problem-solving. (p. 70)

From this statement, it is clear that Tyler believed that guiding students through real-life training outside the classroom represents perhaps the most effective method for developing certain ways of thinking.

On the other hand, the learning experiences which Tyler believed are the most helpful for "acquiring information" are those methods which have been traditionally used in the classroom, including textbook assignments, lecture, group discussion, and others. However, Tyler warned that each of these methods has the potential for promoting learning by "rote memorization" rather than real understanding of the knowledge. Studies indicate that knowledge acquired strictly by memorization is quickly forgotten. In general, students forget 50% of memorized information within one year and 75% after two years (Tyler, 1949). To avoid forgetting and promote knowledge retention, it is recommended that only the most important and meaningful information be included in the curriculum. Relatedly, Tyler (1949) suggested that:

> In place of having thousands of technical terms to be learned, as is sometimes done in science courses, the number of terms selected should be much fewer and of sufficient importance that it will be possible for students to acquire the information with accuracy and precision. (p. 74)

After objectives and learning experiences have been adequately synchronized, curriculum designers following Tyler's model proceed to the next step, organizing the educational components into a coherent program. It is commonly accepted that instruction must be well organized to ensure instructional effectiveness. However, even though careful consideration has been given for selecting the most important objectives

and learning experiences for the curriculum, it is even more crucial that identified components are thoughtfully arranged so as to facilitate the most productive educational framework. If educational experiences are presented haphazardly, instructional efficiency is diminished and often leads to fragmented knowledge in the learner. As Tyler (1949) observed:

> In order for educational experiences to produce a cumulative effect, they must be organized so as to reinforce each other. Organization is thus seen as an important procedure in curriculum development because it greatly influences the efficiency of instruction and the degree to which major changes are brought about in the learners. . . . If learning experiences have no appreciable connection, the student develops compartmentalized learnings which are not related to each other in any effective way. (p. 84)

In order to achieve optimal arrangement of the curriculum, Tyler proposed a number of criteria for designing the organizational structure. However, he concluded that the most prevalent of these is sequential ordering. Tyler (1949) noted that, "one of the most common principles of organization used in curriculum design is the chronological. On this basis, for example, history courses are commonly organized so that the student sees the development of events over time" (p. 96). Tyler went on to state that, "sequence emphasizes the importance of having each successive experience build upon the preceding one . . ." (p. 85).

After reviewing Tyler's work, it is clear that his model has significant implications for the development of a specialized curriculum for the preparation of substance abuse counselors. First, as has been previously noted, very little agreement exists among researchers regarding the fundamental elements of a curriculum for preparing substance abuse counselors. After reviewing Tyler's method, it is clear this disparity is due to the

fact that each previous study of substance abuse counselor preparation used participants from a single group. Tyler (1949) admonished, ". . . no single source is adequate to provide the basis for making wise and comprehensive decisions . . ." (p. 5). Therefore, it can be concluded that data collected in the present study (i.e., information that is based upon the responses from multiple sources, including learners, members of contemporary life, and subject matter experts) will result in more congruent and certain curriculum standards for preparing substance abuse counseling professionals.

Second, the distillation of objectives provided by the first step of Tyler's model would be of great benefit to the present investigation. In the past, a number of work analyses have been performed to determine the behavioral tasks unique to formally trained substance abuse counselors with graduate degrees (Page & Bailey, 1995; Page, Bailey, Barker, & Clawson, 1995; Von Steen, 1996). What has ensued from these studies is an overly extensive list of objectives for the graduate-level preparation of substance abuse counselors. Using the methods outlined by Tyler would allow this excessive list to be winnowed to a meaningful group of workable goals.

Finally, counselor educators have long recognized that the professional preparation of counselors requires instruction based on both "academic units" and "supervised clinical practice" (Vacc & Loesch, 1994). Studies indicate that counselors trained solely on one method or the other are significantly less effective compared to those with academic *and* practical training (Beale, Copenhaver, & Grinnan, 1997; Johnson, 1987; Myers, 1994). Therefore, it is essential to determine which learning experiences, either academic course work or supervised internship, would be best for realizing each of the identified

educational objectives pertaining to the preparation of substance abuse counselors. If curriculum objectives are not aligned with correct learning experiences, the integrity of the educational program is substantially compromised.

Support for the Delphi Technique

As is the case with other investigations, there are a number of research methods that conceivably could have been used in this study. However, logic dictates that some are invariably better suited than others depending on the specific circumstances of the study. Therefore, it is incumbent upon the investigator to identify the approach that provides the most valid and comprehensive answers to the proposed research questions. With this in mind, the Delphi technique was selected as the methodological approach for the present study. What follows is a review of the technique and support for its selection in this study.

The Delphi technique has been described as an investigative procedure devised to survey a group of informed individuals in order to gain consensus about a specific topic (Fish & Busby, 1996). In general, it is technique that structures communication among individuals who don't normally agree in order to obtain a comprehensive and standardized solution to a given problem. Dalkey (1972) identified three primary characteristics of the Delphi technique:

1. Anonymity--effected by the use of questionnaires or other formal communication channels, such as on-line computer communications, is a way of reducing the effect of dominant individuals.

2. Controlled feedback--conducting the exercise in a sequence of rounds, between which a summary of the results of the previous round is communicated to the participants, is a device for reducing noise.

3. Statistical group response--is a device to assure that the opinion of every member is represented in the final response. (p. 21)

In particular, the Delphi technique consists of a series of stages typically referred to as "rounds." While some studies have employed upwards of five rounds, the typical number needed to arrive at consensus of opinion is 2 or 3. After reviewing the numerous Delphi studies recorded in the literature, Linstone and Turoff (1975) observed that

> . . . a point of diminishing returns is reached after a few rounds. Most commonly, three rounds proved to be sufficient to attain stability in the responses; further rounds tended to show very little change and excessive repetition was unacceptable to participants. (p. 229)

Initiation of the Delphi technique begins with a review of the literature for the identification and selection of items for the creation of a formal questionnaire pertinent to the topic of interest. Creation of the questionnaire can be executed solely by the investigator or by surveying the opinions of participants (Dalkey, 1972). In round one, the newly formulated questionnaire is submitted to the selected group members for registering their opinions. Participants are typically asked to rank items based on one or more of the following: (a) desirability (effectiveness or benefit), (b) feasibility, (c) importance, or (d) reliability (Linestone & Turoff, 1975). Members anonymously record their responses and return the questionnaire to the investigator.

In round two, the responses are tabulated, analyzed, and interpreted. Typically the lowest scores, in regard to either importance, feasibility, or reliability, are dropped from the list. A revised questionnaire is then returned to the selected panel for further consideration. Participants are asked to re-evaluate the data and to indicate whether additional changes are necessary. This process continues until a degree of consensus is reached and a final report is established (Dalkey, 1972). Linstone and Turoff (1975)

pointed out that this sequential procedure has been adapted to numerous applications, including

1. gathering current and historical data not accurately known or available.
2. examining the significance of historical events.
3. evaluating possible budget allocations.
4. exploring urban and regional planning options.
5. planning university campus and curriculum development
6. putting together the structure of a model.
7. delineating the pros and cons of potential policy outcomes.
8. developing causal relationships in economic and social phenomena.
9. distinguishing and clarifying real and perceived human motivation
10. exposing priories of personal values and social good.

Although evidence suggests that the Delphi technique is a useful method which can be applied to each of the previously mentioned tasks, it also was determined to be the best choice for the present study for several reasons. First, the technique has been proven to be an effective method for developing university curricula. A number of educational investigations document the effectiveness of the Delphi technique when developing pertinent and effective curricula in higher education. For example, Lewis (1984) examined studies in higher education to determine what types of Delphi studies were conducted. She found that the majority of studies that used the Delphi method in higher education were involved with curriculum and instruction. More important, Lewis' investigation revealed that 73% of faculty members believed the Delphi technique provided valid data.

Walley and Webb (1997) also selected the Delphi method to structure communication among a panel of experts for the purpose of developing a core curriculum in clinical pharmacology. The investigation revealed that the Delphi technique was successful in that it facilitated a consensus among subject matter specialists regarding the knowledge, skills, and attitudes deemed necessary for clinical practice in pharmacology.

In a similar study, Winkle, Piercy, and Hovestadt (1981) used the Delphi technique to develop a graduate-level curriculum for training marriage and family counselors. Three rounds of questionnaires rendered a consensus among a panel of 45 experts for identifying the optimal curriculum components for preparing counselors working with couples and families. In particular, 101 counseling theories and techniques deemed to be essential to marriage and family counseling were established. More importantly, further analysis revealed that a majority of these aligned with the guidelines of the American Association of Marriage and Family Therapists.

A final example additionally evidences the effectiveness of the Delphi technique for developing a curriculum for higher education. Zargari and Campell (1997) used the Delphi method to determine the curriculum content of a doctoral degree program in industrial technology. Prior to the study, the authors noted that such a curriculum had not been established for the transmitting the knowledge and skills expected of those with terminal degrees in industrial technology. Using the technique, majority opinion was successfully reached among a group of identified experts and thereby identified 42 content areas included in a sixty-semester hour program for preparing doctor of philosophy students in industrial technology.

The reason that the Delphi technique is productive in these areas as well as in the present study is that it, unlike any other research method, has the capacity to identify and then prioritize curriculum objectives. This function has been deemed crucial for the development of effective curricula. Tyler (1949) observed that a procedure for identifying and then screening educational goals is essential because curriculum researchers often identify such an extensive list of instructional objectives that no academic program would have the time to undertake. Too many objectives can be counterproductive. Tyler (1949) stated:

> A small number of highly important objectives need to be selected. A small number rather than many should be aimed at since it requires time to attain educational objectives. An educational program is not effective in so much is attempted that little is accomplished. (p. 33)

Clearly, the application of the Delphi technique would facilitate the screening of educational objectives. Specifically, the Delphi procedure uses a number of successive rounds to survey the opinions of participants. After each round, responses are tabulated and the lowest scores dropped (Linestone & Turoff, 1975). In the study of curriculum objectives, this procedure would conceivably end with a distilled list of only the most important goals.

Second, the Delphi technique was selected because it aligns thoroughly with the data collection procedure outlined in Tyler's curriculum model; the Delphi technique allows the researcher to gather and analyze data from a number of subgroups that have important knowledge to share regarding the preparation of a university curriculum. The precision of the fit between the Delphi and Tyler's model is noted by Scheele (1975), who wrote

> Three kinds of panelists are necessary for creating a successful mix: *stakeholders,* those who are or will be directly affected; *experts,* those who have an applicable specialty or relevant experience; and *facilitators*, those who have skills in clarifying, organizing synthesizing, stimulating, (and) can supply alternative global views. . . . (p. 68)

Clearly, the three types of panelists discussed by Scheele (1975), the stakeholders, facilitators, and experts, are tantamount to the key sources for curriculum content identified by Tyler (i.e., the learner, those involved in contemporary life outside the school, and subject matter specialists curriculum).

Third, the Delphi method, unlike other research designs, facilitates convergence of opinion among participants who have similar expertise in a given area, but may manifest very different ideas. Many who have studied systematic procedures for managing group judgments have noted that the Delphi is one of the most effective methods for facilitating consensus of judgement among different subgroups of panelists. For example, Dalkey (1972) stated that

> ...experts with apparently equivalent credentials (equal degrees of expertness) are likely to give quite different answers to the same question. One of the main advantages of using a group response like the Delphi is that this diversity is replaced by a single representative opinion. (Dalkey 1972 p.17).

This methodological feature of the Delphi is particularly important in the present study which attempts to distill the expert judgements among three different groups substance abuse counseling professionals.

Summary of Major Points

Although some disagree, professionals from various disciplines, (e.g., medicine and law) acknowledge the need for and legitimacy of specialized training for addressing the increasingly complex and varied problems facing those they serve. Counselors, too, have

discovered that specialized training beyond that provided by a general preparation in counseling is necessary. Over the years, several areas of specialization have been established by counselors, including career counseling, school counseling, mental health counseling and gerontological counseling. And although decried by some, substance abuse counseling has been added to the list of counseling specialities. Studies supporting the legitimacy of the speciality have (1) identified a body of knowledge and skills unique to substance abuse counseling, (2) revealed that counselors with specialized substance abuse training are perceived as more effective by program administrators and other counselors, and (3) concluded that those with specialized substance abuse training are clinically more effective when compared to their untrained counterparts.

More importantly, recent studies reveal a significant increase in the demand for graduate training of substance abuse counseling professionals. Investigations show that (1) there has been a substantial increase in the number of substance abuse problems among adolescents, adults, and the elderly in the United States, (2) dual-disorders (the combination of a substance abuse and another mental disorder) is becoming more common among those presenting for counseling services, and (3) managed care companies, which require a graduate degree for third-party reimbursement, have become more prevalent.

Despite these demands, no standardized curriculum exists for the specialized training of graduate-level substance abuse counselors. While a number of work behavior studies have identified the knowledge and skill competencies required of graduate-level substance abuse counselors, the findings were limited to the development of certification

examinations. The lack of uniform curriculum standards has resulted in a great deal of disparity between substance abuse course content from university to university. In fact, investigations into substance abuse course work provided by counseling programs deemed to be the most standardized (i.e., those based on the uniform curriculum requirements set forth by CACREP) vary greatly in content and organization. Clearly, curriculum standards for preparing graduate-level substance abuse counselors are needed.

Therefore, this study seeks to identify the components of a standardized curriculum for the specialized preparation of substance abuse counselors by employing the Delphi technique to attend to the salient tenets of Tyler's (1949) curriculum theory. Using Tyler's model, one which emphasizes empirical methods for determining curriculum objectives, experiences, and sequence assures that the curriculum standards identified by the present study are not only unbiased, but also relevant.

CHAPTER 3
METHODOLOGY

The significant curriculum experiences for the specialized preparation of substance abuse counselors trained at the graduate-level have not been identified. Therefore, the current study employed the Delphi technique to achieve a consensus among substance abuse counselors, substance abuse program administrators, and university professors in order to determine the initial curriculum components for the preparation of graduate-level substance abuse counselors. This chapter includes discussion of the procedures for initial development of the survey instrument, panelists who participated in the study, sampling procedures used, and procedures used to conduct the study. The final portion of this chapter reports the methods by which the data were gathered and subsequently analyzed.

Sampling Procedures

Following Tyler's (1949) guidelines, the sample for this study included subjects from three different groups: substance abuse counselors, substance abuse center administrators, and university employed substance abuse counselor educators. Because the preparation of graduate-level of substance abuse counselors is the principal matter examined in this study, it was essential to include only those participants who held a master's degree or higher. In addition, specific parameters were applied to each of the participant subgroups in order to improve the likelihood of gathering responses from the most knowledgeable and competent substance abuse counseling experts. For example,

subjects representing substance abuse counselors included only those who were currently working in private practice or in an agency as an outpatient or inpatient alcohol or drug counselor, and therefore not those who held degrees and credentials and worked in an occupation unrelated to substance abuse counseling. Subjects representing substance abuse treatment center administrators included only those whose work time was primarily devoted to the management and supervision of substance abuse counselors, and therefore not those who were primarily supervisors of generalist counselors who did not specialize in substance abuse counseling. Subjects representing substance abuse counselor educators included only those who held national substance abuse credentials so as to establish that only those with substantial knowledge and experience of substance abuse counseling participated in this study, and therefore not counselor educators who have been teaching substance abuse counseling course work but who had not demonstrated mastery of the subject by acquiring a substance abuse counseling credential.

The validity of a Delphi study depends chiefly on the level of panel member expertise rather than random selection procedures. Fish and Busby (1996) wrote:

> Panel selection is a critical element in the Delphi Method. . . . (P)anelist knowledge of the subject matter at hand is the most significant assurance of a quality outcome using the Delphi Method. Therefore Delphi panelists are chosen for their expertise rather through a random process. (p. 469)

Accordingly, in this study care was taken to select only participants who were recognized as leaders in the field of substance abuse counseling (rather than include less knowledgeable participants by using random selection).

If the validity of a Delphi depends on the degree of participant expertise, how can it

be ensured that participants in this study were truly experts in the area of substance abuse counseling? The method most frequently used by Delphi researchers is the "nomination" process through which the principal investigator of the study contacts a number of professionals in the area of concern and asks for recommendations. In his study of the Delphi method for developing educational goals, Clayton (1997) outlined the nomination procedure:

> Nominations of well known and respected members of the targeted groups should be solicited, and through a process of ranking and culling, highly ranked nominees become evident and form the basis for panel selection. The selection process can be quite motivating as there is degree of flattery associated with being nominated as an expert by one's peers. (p. 378)

While it can be assumed that this method is successful to identify credible subject matter experts, a potential for selection error exists. Regarding nominations, Linstone (1975) warned:

> Poor selection of participants (e.g., friends recommending each other for panel membership) can produce a cozy group of like-thinking individuals which excludes mavericks and becomes a vehicle for inbreeding. (p. 582-3)

Similarly, Brockhoff (1975) wrote:

> A "proof" by recourse to third parties (e.g., nominations) can hardly confirm more than a refutable conjecture to the expertise of the person. It is necessary to measure expertise as an independent variable using another means. (p. 295)

Thus, to overcome the problems associated with subjectivity inherent in the nomination process and to improve the validity of the study and its findings, it was essential to substantiate participant expertise through a more objective method (e.g., years of experience, number of published scholarly papers on the topic of interest, and holding a professional credential).

Another concern when conducting a Delphi is panel size. According to Dobbins (1999), no agreed upon guidelines for calculating sample size for using the Delphi method exists. Moreover, the literature indicates that Delphi researchers disagree about the optimal size of a panel among Delphi researchers. For example, some, like Delbecq, Van de Ven, and Gustafson (1975), have suggested that several hundred participants may be needed to solve complex problems. However, others disagree with Delbecq and his colleagues and argue that much smaller groups can be used to generate accurate and reliable answers. For example, Turoff (1975) noted reliable data could be obtained from panels of 10-50 people. A similar conclusion was reached by Brokoff (1975) after conducting a series of experiments to evaluate the Delphi method which revealed that larger groups did not necessarily translate into more accurate data. Likewise, an investigation very germane to this study found that smaller panels were sufficient for making critical decisions in education. Clayton (1997) wrote:

> Group size theory varies, but some general rules-of-thumb indicate 15-30 people for a homogeneous population-that is, experts coming from the same discipline (e.g., nuclear physicists)- and 5-10 people for a heterogeneous population, people with expertise on a particular topic but coming from different social/professional stratifications such as teachers, university academicians, and school principals. (p. 378).

In view of these considerations, participants in this study were selected primarily based on level of expertise, followed by desired panel size. Even though sample size was a secondary concern, every effort was made to include the largest number of qualified experts in each of the three categories.

In order to verify expertise, participants were selected from members of credentialing organizations that recognize excellence in each particular category. Forty-

six substance abuse counseling program administrators were selected from the top substance abuse counseling providers accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), perhaps the most widely-known national credential for the evaluation and recognition of behavioral healthcare providers. JCAHO awards each of the behavioral healthcare providers under its auspices one of three different accreditation rankings: (1) Accredited with Commendations, (i.e., the highest award given only to those organizations demonstrating exemplary performance), (2) Accredited without Recommendation (i.e., awarded to organizations that meet the minimum standards), and (3) Accredited with Recommendations (i.e., awarded to organizations that marginally met the majority of JCAHO standards, but are found lacking in one or more important areas). A review of the 1,624 behavioral healthcare providers accredited by JCAHO revealed 46 substance abuse counseling providers that had been Accredited with Commendations.

Correspondingly, 46 substance abuse counselors were randomly selected from a pool of 606 counselors who held the Master of Addiction Counselor (MAC) credential awarded by NBCC. The MAC credential was selected over other substance abuse credentials for the following reasons. First, those who hold the MAC are required to have completed a master's degree in one of the helping professions (e.g., counseling, psychology, or social work). Other substance abuse credentials require only a bachelor's degree and responses from those individuals would have been irrelevant in a study of a master's-level curriculum. Second, those who hold the MAC have obtained a passing score on an examination that was developed from a recent work behavior analysis of

practicing substance abuse counselors. Other substance abuse credentialing bodies require a passing score on examinations that are either not based on a work behavior analysis (and thus are prone to bias) or on work behavior analyses that are over 20 years old (and thus may include irrelevant data, including obsolete work behaviors).

Twenty-six substance abuse counselor educators were selected from those who held the MAC credential and were employed as university professors in graduate-level counselor education programs. These individuals were identified by the NBCC which conducted a sort of the pool of individuals who held a MAC while controlling for place of employment (i.e., as a counselor educator in an institution of higher learning).

The rationale for selecting participants in this manner was threefold. First, selecting only substance abuse counselor educators employed in graduate-level programs eliminated those who had earned a doctoral degree but taught only in undergraduate behavioral healthcare programs (e.g., psychology, social work, or sociology). It also removed the potential for collecting unsuitable data from those who were most familiar with the development of baccalaureate curricula, which are arguably less comprehensive than graduate-level course work.

Second, selecting participants from those employed as professors in graduate-level counselor education programs reduced the likelihood of sampling bias in this study by controlling for between-group similarity. If participants were selected from those with an earned doctoral degree in counseling without controlling for place of employment, there would have been a strong likelihood that this part of the sample would have been

contaminated by including substance abuse counselors or substance abuse program administrators who also held a doctorate.

Finally, selecting participants for the subgroup of substance abuse counselor educators from among those who held the MAC credential increased the likelihood that counselor educators with considerable knowledge and experience related to the specialty of substance abuse counseling would be included in the study and professors of counselor education whose expertise exists in another counseling area would be excluded.

Resultant Panel

The initial instrument and cover letter were sent to each of the 118 identified experts. Of these, a total of 29 returned completed first round instruments. Twenty-eight were retained as round one panelists. One response set was excluded after it was determined that the participant's educational preparation did not match the parameters of this study. The 28 participants represented a response rate of 24% which was found to be similar to other studies which employed lengthy and complex instruments (e.g., Von Steen, 1996; Seels & Glasgow, 1991).

Data Collection Procedures

Instrumentation

The initial instrument for this study was created using items from two previously conducted studies that had investigated the essential work behaviors of master's-level substance abuse counselors. Both Von Steen (1996) and NBCC (Page, et al., 1995) factor analyzed the responses collected from substance abuse counseling professionals for the purpose of identifying which of the many work behaviors associated with counseling

were essential for the specialized practice of master's-level substance abuse counseling. In both studies, only the items with highest factor loadings were retained in a pared list. In development of the initial instrument for this study, non-overlapping items from each of these studies were included. In order to ensure item integrity, a strategic method was developed to guide item selection, including the following procedures:

(1) When duplicated items, (i.e., items that shared nearly identical words, phrases, and meaning) were discovered, the item that described the work behavior most precisely was retained to avoid redundancy.

(2) When items from each study appeared similar but had ostensibly different interpretations, both were included.

(3) No effort was made to rearrange or replace the phrasing of the items; wordings were retained exactly as they appeared in the original studies.

Construction

The resultant, initial questionnaire (Appendix A) consisted of 198 items. The questionnaire consisted of 13 pages, including one page of instructions, a page of demographic questions, and 11 pages of items. A Likert-type scale was used to rate each item. Clayton (1996) noted that a 5 or 7- point Likert scales are the best method for determining numerical judgements when using the Delphi method. Participants in this study were thus instructed to indicate on a 5-point Likert-type scale how important it is to teach each item (i.e., work behavior) for the preparation of master's level substance abuse counselors: (1) not important, (2) slightly important, (3) moderately important, (4) very important, or (5) absolutely essential.

In addition to ratings of importance, participants also were asked to indicate which of four instructional methods, including (1) traditional lecture, (2) interactive lecture, (3) collaborative interactive, and (4) supervised practice, was the most suitable for teaching each work behavior. The four instructional methods used in this study were derived from those of Kozma, Belle, and Williams (1978) who recommended them for use in higher education. Minor revisions were made to the titles of the instructional methods to reflect current nomenclature. Detailed explanations of each instructional method, including descriptions of the learner and the instructor, were provided on the instruction page.

Collection of Data

As discussed previously, several studies have shown that gathering data using the Delphi method is accomplished most effectively by re-administering a continuously evolving Likert-type questionnaire in a three-stage process. Accordingly, it was the data collection procedure employed in this study.

Round I

The 118 participants selected for this study were mailed a copy of the initial instrument accompanied by a cover letter/informed consent form (Appendix B), and a stamped, self-addressed return envelope. Instruments were individually labeled in order to allow monitoring of respondent participation. Participants were asked to complete and return the initial instrument within three weeks. A follow-up letter (Appendix C) was mailed 10 days after the initial mailing to encourage participation.

Considering that participants might not deem all tasks to be necessary for the construction of an effective substance abuse curriculum, it was necessary to select a

procedure for eliminating items judged to be of minimal importance. A review of previously conducted Delphi studies revealed that a variety of procedures have been used for truncating item lists between rounds, including the use of a modified scree test, multiple linear regression, rank order discrimination, and mean score analyses. Even though it has been asserted that some of the aforementioned methods are statistically superior to others, a closer examination reveals that a very similar degree of bias exists among all of these item paring procedures. Therefore, an a priori decision was made to use mean score analysis to determine item retention or elimination not because it is a less arbitrary procedure, but instead because it is a logical and easily interpretable method for making item determinations. A "cut-off" point was determined by reviewing the descending list of the mean item scores to determine the point at which the largest numerical gap between item scores existed. Items above the gap were retained. Items below were removed.

Results from the returned instruments were tabulated and analyzed. Mean scores higher than or equal to the number representing the top of the gap between means were retained. The 51 items with mean scores that fell below the gap were eliminated from the study.

Round II

In round two, a second instrument containing only the retained 139 items was constructed and mailed to those participants who completed and returned the first round instrument. In addition to the second-round instrument, participants received a cover letter, instructions, and a stamped, self-addressed return envelope. The revised instrument

also included mean scores for each of the retained items from round one. The second instrument also was individualized for each participant, that is, each participant was provided with their previous numerical response for each item. Instruments again were labeled in order to track individual responses. Instructions included with the round two instrument directed participants to examine their initial response and the mean score for each item for the purpose of re-evaluating their judgment for each item (i.e., participants were asked to retain or change their responses to items based on a comparison of mean and individual scores). Participants then were again asked to complete and return the instrument within three weeks.

Returned instruments were tabulated and analyzed as before. Mean scores were again examined to determine which items would be retained and which eliminated for the revised instrument used in Round III.

Round III

For the final round of the study, the revised instrument was mailed to those participants who completed and returned both instruments from previous rounds. As in the previous round, documents additional to the revised instrument were sent, including a cover letter, instructions, and a stamped, self-addressed return envelope. The third instrument was individualized for each participant by inclusion of second-round item means and their second-round numerical response for each item. The instructions directed participants to examine their initial response and the mean score for each item for the purpose of re-evaluating their judgement on each item. Participants were asked to complete and return the instrument within three weeks.

Data Analyses

Data in this study were analyzed using a number of different procedures. First, item mean scores and standard deviations were calculated from responses to item importance and instructional method. Although other methods have been used to analyze panelist responses in a Delphi study, the mean was reported in this study because it is the most precise measure of central tendency and, more importantly, the standard deviation gave an accurate representation of the degree of consensus among participant responses.

Finally, a post hoc, multivariate analysis of variance (MANOVA) was conducted to examine whether significant differences in item rating means existed for each of the independent variables, including each of the different subgroups, job classification, gender, educational level, percentage of education related to substance abuse counseling, and philosophy of treatment.

CHAPTER 4
RESULTS

This chapter reports the findings of a Delphi study used to identify the initial curriculum components for preparing graduate-level substance abuse counselors. Analysis and presentation of the data is organized as follows. First, demographics of participants in the study are presented. Frequencies of panelists' job classification, years of experience, racial orientation, gender, education level, percentage of education related to substance abuse, and philosophy of treatment are provided. Second, panelist response data to items associated with each of the three rounds of the Delphi are analyzed, compared, and reported. Finally, post hoc analyses which examine the possibility of significant differences between panelist subgroup responses are reported.

Panelist Demographics

As noted previously, 28 expert panelists were retained for this study. Descriptive information related to participants is presented in table 1. Occupational subgroup participation was essentially equal. Nine (32.1%) of these panelists identified themselves as substance abuse counselors. Ten (35.7%) of these panelist were identified as substance abuse program administrators. And 9 (32.1.%) identified as substance abuse counselor educators. Years of substance abuse experience ranged from 4 to 30 years with a mean 16.39 and a mode of 10 years.

Table 1.

Panel Demographics

Factor	Frequency	Percent
Occupational Subgroup		
Substance Abuse Counselors	9	32.1
Substance Abuse Program Administrators	10	35.7
Substance Abuse Counselor Educator	9	32.1
Educational Level		
Masters	16	57.1
Educational Specialist	3	10.7
Doctoral	9	32.1
Percentage of Education Related to Substance Abuse		
Less than one third	23	82.1
Approximately one third	2	7.1
More than one third	2	7.1
Missing	1	3.7
Ethnicity		
African American	0	0.0
Asian/Pacific Islander	0	0.0
Caucasian	27	96.4
American Indian/Alaskan Native	0	0.0
Hispanic/Latino	0	0.0
Other	1	3.6
Gender		
Female	9	32.1
Male	19	67.9
Treatment Philosophy		
Disease Model (12-step)	16	59.3
Cognitive-behavioral	9	33.3
Solution-focused	0	0.0
Psychodynamic	1	3.7
Other (eclectic)	1	3.7

Participants' education level varied:16 (57%) held a master's degree, 3 (11%) held an educational specialist degree, and 9 (32.%) held a doctoral degree. In regard to ethnicity, a majority of the panelists were Caucasian (96.4%) , and only 3.6% identified as non-Caucasian. Approximately 68% of participants were male and 32% were female. Participant's philosophy of substance abuse treatment also varied. Sixteen (59%) favored the 12-Step disease model, 9 (33%) favored cognitive-behavioral theory, 1 (4%) favored psychodynamic theory, and 1 (4%) made no selection.

Delphi Response Profile

Round I

In the first round, 28 participants rated the importance and indicated the best method of instruction for each of the 198 suggested curriculum items included on the initial survey (see Table 2). The mean and standard deviations of participant responses concerning the importance ratings for each item were calculated and are reported in descending order in Table 3. Item mean scores ranged from 1.07 to 4.82. Standard deviations (SD) of the rated items ranged from 0.39 to 1.50. The lowest standard deviation, (i.e., those indicating the most consensus among participant responses), generally occurred among the items with the highest mean scores.

Participants' round one responses concerning the best educational method for each substance abuse counseling curriculum statement were also analyzed and are reported in Table 3. Percentages for the educational method indicated for each item ranged from 0%, indicating that no participant selected that particular educational method for teaching a specific curriculum item, to 71.4% which indicated that nearly three-quarters of the

Table 2.

Initial List of Curriculum Items

	Item Statement
1.	Assess client's participation in 12-step program..
2.	Assess spiritual functioning.
3.	Administer substance abuse assessments.
4.	Use self-report personality inventories.
5.	Inform family of family dynamics/roles.
6.	Inform client about detox process.
7.	Use media resources in counseling.
8.	Counseling client concerning life style change.
9.	Counseling client concerning human sexuality.
10.	Counsel client concerning physical abuse.
11.	Counsel client concerning spiritual issues.
12.	Provide appropriate home-work assignments.
13.	Educate client about self-help groups.
14.	Make 12-step assignments.
15.	Process 12-step assignments.
16.	Clarify client's moral/spiritual issues.
17.	Facilitate client exploration of consequences of substance abuse.
18.	Educate client about consequences of drug abuse.
19.	Provide impetus for client to remain in treatment.
20.	Discuss positive urine screen.
21.	Address violation of agency rules.
22.	Counsel client regarding defense mechanisms.
23.	Conduct former client follow-up activities.
24.	Educate significant others about self-help groups.
25.	Counsel significant others concerning substance abuse.
26.	Select clients for group participation.
27.	Inform clients of group counseling guidelines.
28.	Systematically observe group members behaviors.
29.	Identify harmful group behaviors.
30.	Evaluate progress toward treatment goals.
31.	Facilitate conflict resolution among group participants.
32.	Assist with group members feedback to each other.
33.	Determine group counseling effectiveness.
34.	Use structured activities during group counseling.
35.	Use leader-centered group counseling techniques.
36.	Use group-centered group counseling techniques.
37.	Facilitate client's development of job-search skills.
38.	Assist disabled clients with assignments.

Table 2–Continued

	Item statement
39.	Monitor drug screening test results.
40.	Communicate with funding sources regarding client's treatment.
41.	Investigate half-way house alternatives.
42.	Assist client's in constructing effective support systems.
43.	Assist client in obtaining a temporary sponsor
44.	Arrange aftercare services.
45.	Involve significant others in aftercare services.
46.	Facilitate return to work conferences.
47.	Educate non-treatment staff about substance abuse.
48.	Participate in self-help group activities.
49.	Determine previous/current use of different substances.
50.	Determine severity of client's substance abuse problem.
51.	Assess client's understanding of his/her substance dependency.
52.	Conduct pretreatment diagnostic interview.
53.	Evaluate existing (pre-counseling) client data.
54.	Discuss client's reasons for seeking treatment.
55.	Assess client's motivation for treatment.
56.	Identify client's internal/external resources.
57.	Assess client's educational history.
58.	Assess for learning disabilities.
59.	Clarify client's support system.
60.	Assess client's family history of addictive disorders.
61.	Select appraisal instruments/techniques for counseling.
62.	Integrate assessment results.
63.	Use assessment results to aid client in making decisions.
64.	Use assessment results to aid in intervention selections.
65.	Use non-test appraisal techniques.
66.	Evaluate extent of client's psychological dysfunction
67.	Determine DSM- IV classifications.
68.	Evaluate client need for further assessment.
69.	Obtain client medical history.
70.	Assist client in understanding of test results.
71.	Determine if client will be admitted for treatment.
72.	Evaluate need for client referral for treatment.
73.	Assess potential for client to harm self/others.
74.	Determine necessity for an intervention.
75.	Inform client of program services.
76.	Clarify family counseling goals.
77.	Explore client's educational opportunities.
78.	Establish rapport with family and significant others.
79.	Contract with client regarding treatment rules.

Table 2–Continued

	Item Statement
80.	Inform client about ethical standards and practice
81.	Complete release of information forms.
82.	Co-construct comprehensive treatment plans.
83.	Establish counseling goals and objectives.
84.	Identify source of problems.
85.	Assist client in setting short-term and long-term goals.
86.	Function as a member of an interdisciplinary treatment team.
87.	Observe client for medication side-effects.
88.	Provided client information when authorized.
89.	Assess client's strengths and limitations.
90.	Participate in staff decision-making process.
91.	Apply ethical/or Federal counseling legal standards.
92.	Negotiate with client a time frame for goal attainment.
93.	Implement treatment plans.
94.	Evaluate client's movement toward counseling goals.
95.	Assist client to recognize strengths and weaknesses.
96.	Assist client in evaluation of progress in treatment.
97.	Self-evaluate counseling progress.
98.	Develop a therapeutic relationship with client.
99.	Utilize different treatment approaches.
100.	Use behavioral-oriented counseling techniques.
101.	Use cognitive-oriented counseling techniques.
102.	Reframe client's problems.
103.	Assess client's readiness for discharge.
104.	Prepare client for termination from counseling.
105.	Facilitate client's development of decision-making skills.
106.	Conduct case reviews to assure quality services.
107.	Assess programmatic service goals.
108.	Establish programmatic service goals.
109.	Provide clinical supervision.
110.	Provide administrative supervision.
111.	Evaluate counselor's performance.
112.	Provide counselor skill-development.
113.	Coordinate volunteer activities.
114.	Mediate treatment staff/client conflict.
115.	Administer treatment program.
116.	Allocate financial resources for treatment program.
117.	Develop program-related reports.
118.	Conduct fund-raising activities for program development.
119.	Provide orientation to new personnel.
120.	Participate in program research activities.

Table 2–Continued

Item Statement
121. Perform clerical tasks.
122. Engage in client data analyses.
123. Communicate needs for services in the community.
124. Conduct community outreach.
125. Organize professional conference and seminar.
126. Collaborate in research with other mental health professionals.
127. Participate in continuing education/skills training.
128. Use prevention measures to guard against counselor burn-out.
129. Provide counseling for age-related issues.
130. Use crisis intervention approach/techniques.
131. Use structural family counseling techniques.
132. Use strategic family counseling techniques.
133. Counsel concerning divorce.
134. Counsel concerning family change.
135. Use behavioral family counseling.
136. Counsel client concerning culturally specific issues.
137. Counsel concerning marital discord.
138. Counsel concerning family member interaction.
139. Counsel client concerning sexual abuse.
140. Develop family conflict resolution strategies.
141. Use mulitgenerational family counseling techniques.
142. Advocate for client interest with courts/employers.
143. Inform family members of family counseling guidelines.
144. Educate non-treatment staff about counseling services.
145. Develop appraisal instrument/technique.
146. Evaluate media resources.
147. Engage in professional/community public relations.
148. Develop networks with other mental health service providers.
149. Participate in personal and professional development (e.g., review ethics, read current professional literature).
150. Collaborate with referral systems.
151. Read current professional literature.
152. Review ethical standards.
153. Evaluate treatment outcomes.
154. Counsel client regarding relapse prevention.
155. Educate client about different types of addiction (drugs only).
156. Interview client's family and/or significant other(s)
157. Assess match between client's needs and program services.
158. Review legal statutes and regulations.
159. Write for publication.
160. Develop own professional goals and objectives.

Table 2–Continued

Item Statement
161. Provide counseling to clients with suicidal/homicidal ideation.
162. Counsel clients with issues related to violence/destruction.
163. Counsel clients concerning gender issues.
164. Provide counseling concerning chronic/communicable disease.
165. Provide counseling for clients with disabilities.
166. Counseling client concerning pregnancy issues.
167. Provide counseling for the dually-diagnosed client.
168. Counsel client concerning leisure/recreation.
169. Counsel client concerning self-help groups.
170. Provide individual/group and /or crisis counseling for client/family members.
171. Educate client concerning pharmacological interaction of drugs and medications.
172. Obtain client consent before initiating treatment.
173. Conduct mental status examination.
174. Complete diagnostic summary, including psychological, physician, and nursing assessments.
175. Construct comprehensive care/treatment plans, including goals, objectives, strategies, time frame, discharge, and aftercare plan.
176. Evaluate client intake data.
177. Determine appropriate level of care according to American Society of Addictive Medicine.
178. Inform client of services and costs.
179. Provide other resources if not admitted.
180. Conduct pretreatment diagnostic interview.
181. Determine signs and symptoms of intoxication and withdrawal.
182. Clarify provider/client roles.
183. Inform client about treatment process.
184. Counsel client concerning issues related to alternative lifestyles.
185. Prepare age-specific prevention materials.
186. Conduct various prevention-oriented addiction strategies.
187. Promote healthy lifestyle choices.
188. Provide client with education concerning disease concept.
189. Provide client with education concerning cross addiction.
190. Provide client with education concerning stress management.
191. Provide client with education concerning anger management.
192. Provide client with education concerning harm reduction.
193. Provide client with education concerning moderation management.
194. Provide client with education concerning nutrition.
195. Educate client about physical and psychological effects of drugs.
196. Evaluate prevention program effectiveness.
197. Develop prevention programs based on needs assessments.
198. Assess biopsychosocial needs, including client's educational, vocational, addictions, psychiatric, sexual, family, and addiction histories.

participants agreed on an educational method best suited for teaching a particular curriculum item. Twenty-one percent of items had percentages of 50% or greater.

The final procedure determined which items would be eliminated from the initial list of substance abuse counseling curriculum components, and concomitantly, which items would be retained for round two. An a priori decision to remove items below the largest gap in item mean scores was applied. The descending order of item mean scores for ratings of importance was examined and the largest gap, a difference of 0.07, was discovered between mean scores of 3.57 and 3.64. Thus, items with a mean score of 3.57 and less were deleted from the initial curriculum component list. The retained items for round two are presented in Table 4.

Round II

In the second round, a revised instrument that included the 139 retained substance abuse curriculum items was mailed. Twenty-one panelists completed and returned the second round instrument. The means and standard deviations for ratings of importance for each item are reported in descending order in Table 5. Item mean scores ranged from 3.47 to 4.90. Standard deviations of the rated items ranged from 0.30 to1.24. As before, the lowest standard deviations scores, (i.e., those indicating the most consensus among participant responses), generally occurred among items with the highest mean scores.

Participants' responses concerning the best educational method for each substance abuse counseling curriculum statement also were analyzed in round 2, and are reported in Table 4. The percentages for the educational method recommended for each item ranged from 0% to 85.7.% and approximately 64% of items had percentages greater than 50%.

Table 3.

Descending Mean Scores for Round One Ratings of Importance and Frequencies of Educational Method

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
50	4.82	0.39	03.6	32.1	39.3	25.0
51	4.78	0.41	03.6	21.4	28.6	46.4
18	4.67	0.47	14.3	32.1	35.7	17.9
83	4.66	0.48	0.0	25.0	42.9	32.1
172	4.64	0.73	39.3	14.3	17.9	28.6
17	4.64	0.78	0.0	17.9	35.7	46.4
98	4.62	0.68	0.0	03.7	25.9	70.4
8	4.59	0.57	07.4	18.5	48.1	25.9
154	4.53	0.74	10.7	25.0	28.6	35.7
73	4.53	0.96	14.3	25.0	21.4	39.3
162	4.46	0.69	07.4	11.1	29.6	51.9
49	4.46	0.74	10.7	28.6	35.7	25.0
176	4.42	0.79	10.7	28.6	14.3	43.4
175	4.42	0.74	0.0	28.6	17.9	53.6
85	4.42	0.69	0.0	25.0	32.1	42.9
82	4.42	0.79	07.1	32.1	21.4	39.3
68	4.42	0.69	17.9	28.6	25.0	28.6
25	4.42	0.63	03.6	32.1	35.7	28.6
161	4.42	0.74	07.1	10.7	28.6	53.6
13	4.42	0.95	21.4	32.1	28.6	17.9
3	4.42	0.87	03.7	29.6	25.9	40.7
130	4.42	0.50	03.8	19.2	30.8	46.2
101	4.39	0.62	0.0	28.6	21.4	50.0
91	4.39	0.83	0.0	25.0	42.9	32.1
42	4.32	0.61	14.3	10.7	32.1	42.9
156	4.32	0.77	03.6	17.9	28.6	50.0
19	4.32	0.98	07.1	17.9	35.7	39.3
36	4.28	0.71	03.6	17.9	25.0	53.6
32	4.28	0.71	03.6	07.6	35.7	53.6
198	4.28	0.89	03.6	17.9	32.1	46.4
181	4.28	0.81	17.9	28.6	25.0	28.6
167	4.28	1.21	03.6	14.3	32.1	50.0
157	4.28	0.76	07.1	17.9	28.6	46.4
102	4.28	0.81	0.0	17.9	21.4	60.7
100	4.28	0.71	0.0	28.6	21.4	50.0

Table 3–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
28	4.28	0.71	03.6	10.7	39.3	46.4
94	4.28	0.65	03.6	10.7	21.4	64.3
54	4.28	0.97	14.3	17.9	39.3	28.6
173	4.25	0.76	07.4	07.4	44.4	40.7
93	4.25	0.79	07.1	17.9	14.3	60.7
66	4.25	0.79	14.3	25.0	21.4	39.3
189	4.25	0.84	21.4	50.0	10.7	17.9
81	4.25	1.17	35.7	17.9	14.3	32.1
60	4.25	0.79	18.5	55.6	14.8	11.1
52	4.25	1.00	07.1	17.9	35.7	39.3
29	4.25	0.92	07.1	17.9	39.3	35.7
104	4.25	0.70	03.6	25.0	35.7	35.7
155	4.21	0.91	14.3	46.4	21.4	17.9
55	4.21	0.87	10.7	28.6	28.6	32.1
195	4.21	0.83	10.7	60.7	17.9	10.7
89	4.21	0.78	07.1	14.3	39.3	39.3
171	4.19	0.89	37.0	33.3	18.5	11.1
103	4.17	0.86	03.6	32.1	10.7	53.6
71	4.17	1.15	17.9	21.4	32.1	28.6
31	4.17	1.02	03.6	17.9	35.7	42.0
180	4.17	0.94	03.6	21.4	28.6	46.4
149	4.17	0.90	10.7	28.6	28.6	32.1
80	4.17	0.94	17.9	50.0	10.7	21.4
72	4.17	1.09	14.3	25.0	35.7	25.0
65	4.17	0.81	10.7	25.6	17.9	42.9
62	4.17	0.81	14.3	21.4	25.0	39.3
191	4.17	0.86	17.9	46.4	17.9	17.9
190	4.17	0.81	17.9	46.4	21.4	14.3
188	4.17	0.94	25.0	42.9	17.9	14.3
97	4.17	0.94	03.6	25.0	14.3	57.1
153	4.14	0.89	25.9	18.5	33.3	22.2
95	4.14	0.75	07.1	17.9	28.6	46.4
74	4.14	1.04	03.6	28.6	39.3	28.6
183	4.14	0.97	14.3	21.4	10.7	53.6
99	4.14	0.80	0.0	21.4	28.6	50.0
67	4.11	1.08	33.3	33.3	14.8	18.5
150	4.10	0.78	25.9	18.5	33.3	22.2
63	4.10	0.63	10.7	14.3	28.6	46.4

Table 3–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
170	4.10	0.95	03.6	14.3	21.4	60.7
53	4.10	1.03	10.7	39.3	32.1	17.9
30	4.10	0.93	03.6	25.0	28.6	42.9
96	4.10	0.95	03.6	14.3	32.1	50.0
174	4.10	0.91	07.1	32.1	14.3	46.4
22	4.10	0.91	03.6	28.6	32.1	35.7
5	4.07	0.81	07.1	42.9	39.3	10.7
179	4.07	1.05	25.0	21.4	21.4	32.1
78	4.01	1.01	03.6	17.9	32.1	46.4
64	4.07	0.85	07.1	21.4	39.3	32.1
59	4.07	0.85	21.4	42.9	14.3	21.4
24	4.07	0.81	25.0	35.7	17.9	21.4
33	4.03	0.88	07.1	32.1	28.6	32.1
169	4.03	0.99	07.1	17.9	32.1	42.9
86	4.03	0.88	14.3	14.3	14.3	57.1
56	4.03	1.10	25.9	22.2	29.6	22.2
27	4.03	0.83	17.9	21.4	25.0	35.7
44	4.03	0.99	14.3	28.6	28.6	28.6
177	4.00	0.94	14.3	28.6	21.4	35.7
139	4.00	1.14	03.6	14.3	42.9	39.3
84	4.00	0.96	03.8	46.2	23.1	26.9
76	4.00	0.86	03.6	35.7	35.7	25.0
138	4.00	0.81	0.0	21.4	46.4	32.1
87	3.96	0.92	25.0	21.4	14.3	39.3
45	3.96	1.07	03.6	42.9	21.4	32.1
106	3.92	1.05	03.6	35.7	17.9	42.9
61	3.92	0.97	17.9	46.4	17.9	17.9
140	3.89	0.87	10.7	14.3	46.4	28.6
75	3.89	1.06	21.4	35.7	21.4	21.4
187	3.89	0.83	21.4	39.3	14.3	25.0
148	3.89	0.95	10.7	39.2	25.0	28.6
105	3.89	0.95	03.6	21.4	25.0	25.0
90	3.89	0.99	07.1	25.0	17.9	50.0
178	3.82	1.02	32.1	21.4	14.3	32.1
164	3.82	0.94	10.7	25.0	32.1	32.1
163	3.82	0.90	10.7	21.4	35.7	32.1
79	3.82	0.98	07.1	42.9	21.4	28.6
1	3.82	0.94	17.9	42.9	25.0	14.3

Table 3–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
69	3.82	1.18	28.6	46.4	14.3	10.7
136	3.81	1.00	0.0	15.4	38.5	46.2
127	3.81	1.24	14.8	33.3	22.2	29.6
137	3.78	1.02	03.7	22.2	37.0	37.0
20	3.78	0.87	25.0	32.1	32.1	10.7
192	3.78	0.99	21.4	46.4	17.9	14.3
21	3.78	1.25	25.0	25.0	35.7	14.3
131	3.77	0.89	0.0	22.2	29.6	48.1
182	3.75	1.04	21.4	28.6	32.1	17.9
168	3.75	1.26	07.1	25.0	21.4	46.4
16	3.75	0.79	0.0	28.6	46.4	25.0
132	3.74	0.94	03.7	22.2	25.9	48.1
109	3.71	1.24	03.6	35.7	07.1	71.4
165	3.71	1.08	07.1	17.9	35.7	39.3
14	3.71	1.30	17.9	28.6	21.5	32.1
143	3.71	0.89	25.0	25.0	25.0	25.0
92	3.71	0.92	14.3	17.9	35.7	32.1
128	3.70	1.38	14.8	18.5	44.4	22.2
112	3.67	1.05	17.9	21.4	17.9	42.9
158	3.67	1.02	35.7	50.0	07.1	07.1
111	3.67	1.24	10.7	17.9	07.1	64.3
15	3.67	1.30	07.1	35.7	25.0	32.1
10	3.67	0.98	22.2	22.2	48.1	07.4
134	3.66	1.07	03.7	18.5	29.6	48.1
186	3.64	1.06	07.1	39.3	42.9	10.7
26	3.64	0.98	17.9	25.0	28.6	28.6
107	3.64	1.02	25.0	35.7	21.7	17.9
160	3.57	1.13	17.9	50.0	10.7	21.4
152	3.57	1.13	42.9	32.1	10.7	14.3
151	3.57	1.23	42.9	25.0	10.7	21.4
57	3.57	1.13	39.3	28.6	17.9	14.3
135	3.55	1.05	03.7	11.1	37.0	48.1
129	3.55	1.18	11.1	25.9	40.7	22.2
166	3.53	1.03	10.7	32.1	28.6	28.6
88	3.53	1.03	42.9	32.1	03.6	21.4
58	3.53	1.28	32.1	39.3	14.3	14.3
40	3.53	1.10	39.3	17.9	21.4	21.4
2	3.53	0.99	07.1	42.9	39.3	10.7

Table 3–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
12	3.50	0.88	14.3	50.0	17.9	17.9
194	3.50	1.03	25.0	42.9	21.4	10.7
11	3.46	1.10	22.2	18.5	48.1	11.1
23	3.46	1.20	14.3	39.3	25.0	21.4
70	3.42	1.06	28.6	39.3	14.3	17.9
41	3.42	0.95	35.7	25.0	17.9	21..4
9	3.42	0.92	14.3	39.3	32.1	14.3
46	3.40	1.18	18.5	18.5	29.6	33.3
193	3.39	1.22	28.6	42.9	17.9	10.7
35	3.35	0.95	10.7	24.1	21.4	46.4
184	3.35	1.12	07.1	32.1	28.6	32.1
34	3.35	0.91	10.7	25.0	35.7	28.6
108	3.35	1.16	21.4	39.3	14.6	25.0
141	3.32	0.98	14.3	28.6	39.3	17.9
39	3.32	1.09	53.6	17.9	03.6	25.0
43	3.32	1.09	14.3	28.6	25.0	32.1
133	3.29	1.17	07.4	07.4	37.0	48.1
47	3.28	1.11	28.6	39.3	21.4	10.7
38	3.21	0.95	17.9	28.6	28.6	25.0
185	3.17	1.12	14.3	57.1	21.4	07.1
110	3.17	1.36	10.7	17.9	07.1	64.3
77	3.14	1.00	28.6	32.1	17.9	21.4
117	3.14	1.11	32.1	39.3	07.1	21.4
114	3.14	1.35	14.3	17.9	32.1	35.7
197	3.10	1.16	25.0	35.7	28.6	10.7
37	3.10	0.81	17.9	35.7	32.1	14.3
48	3.03	1.26	29.6	14.8	18.5	37.0
115	2.96	1.50	21.4	46.4	10.7	21.4
144	2.96	1.26	42.9	32.1	10.7	14.3
196	2.92	1.18	28.6	39.3	28.6	10.7
124	2.88	1.18	03.7	40.7	14.8	40.7
142	2.85	1.00	18.5	33.3	11.1	33.3
4	2.85	0.90	22.2	18.5	37.0	22.2
147	2.78	1.06	17.9	50.0	10.7	21.4
126	2.77	1.08	40.7	22.2	11.1	25.9
123	2.70	1.17	18.5	48.1	22.2	11.1
122	2.62	0.88	29.6	40.7	18.5	11.1
7	2.57	1.06	37.0	33.3	22.2	07.4

Table 3–Continued

Item Number	Importance		Educational Method			
	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
145	2.50	1.17	42.9	32.1	10.7	14.3
119	2.50	1.19	28.6	35.7	17.9	17.9
116	2.40	1.11	40.7	29.6	18.5	11.1
146	2.39	1.16	42.9	32.1	10.7	14.3
113	2.29	1.05	32.1	28.6	10.7	28.6
120	2.29	1.03	37.0	33.3	14.8	14.8
118	2.14	1.20	42.9	25.0	10.7	21.4
125	2.00	.96	37.0	33.3	07.4	22.2
159	1.89	1.10	55.6	25.9	03.7	14.8
121	1.70	0.82	61.5	26.9	03.8	07.7

Table 4.

Curriculum Items Eliminated in Round One

Item #	Curriculum Statement	M
160	Develop own professional goals and objectives.	3.57
152	Review ethical standards.	3.57
151	Read current professional literature.	3.57
57	Assess client's educational history.	3.57
135	Use behavioral family counseling.	3.55
129	Provide counseling for age related issues.	3.55
166	Counsel clients concerning pregnancy issues.	3.53
88	Provide client information when authorized	3.53
58	Assess client for learning disabilities.	3.53
40	Communicate with funding sources regarding client's treatment.	3.53
2	Assess spiritual functioning.	3.53
12	Provide appropriate homework assignments.	3.50
194	Provide client with education concerning nutrition	3.50
11	Counsel client concerning spiritual values.	3.46
23	Conduct former client follow-up activities.	3.46
70	Assist client in understanding of test results.	3.42
41	Investigate half-way house alternatives.	3.42
9	Counsel client regarding human sexuality	3.42
46	Facilitate return to work conferences.	3.40
193	Provide client with education concerning moderation management.	3.39

Table 4–Continued

Item #	Curriculum Statement	M
35	Use leader-centered group counseling techniques.	3.35
184	Counsel client concerning issues related to alternative lifestyles.	3.35
34	Use structure activities during group counseling.	3.35
108	Establish programmatic service goals.	3.35
141	Use mulitgenerational family counseling guidelines.	3.32
39	Monitor drug screening tests.	3.32
43	Assist client in obtaining a temporary sponsor.	3.32
133	Counsel concerning divorce.	3.29
47	Educate non-treatment staff about substance abuse.	3.28
38	Assist disabled clients with assignments.	3.21
185	Prepare age specific prevention materials.	3.17
110	Provide administrative supervision.	3.17
77	Explore client's educational opportunities.	3.14
117	Develop program related reports.	3.14
114	Mediate treatment staff/client conflict.	3.14
197	Develop prevention plan based on needs assessment.	3.10
37	Facilitate client's development of job search skills.	3.10
48	Participate in self-help activities.	3.03
115	Administer treatment program.	2.96
144	Educate non-treatment staff about services.	2.96
196	Evaluate prevention program effectiveness.	2.92
124	Conduct community outreach.	2.88
142	Advocate for client's interest with courts/employers.	2.85
4	Use self-report personality instruments.	2.85
147	Engage in professional/community relations.	2.78
126	Collaborate in research with other mental health professionals.	2.77
123	Communicate needs for service in the community.	2.70
122	Engage in client data analyses.	2.62
7	Use media sources in counseling.	2.57
145	Develop appraisal instruments/techniques.	2.50
119	Provide orientation to personnel.	2.50
116	Allocate financial resources for treatment program.	2.48
146	Evaluate media resources.	2.39
113	Coordinate volunteer activities.	2.32
120	Participate in program research activities.	2.29
118	Conduct fund raising activities for program development.	2.14
125	Organize professional conferences and seminars.	2.00
159	Review legal statues and regulations.	1.89
121	Perform clerical tasks	1.70

Table 5.

Descending Mean Scores for Round Two Ratings of Importance and Frequencies of Educational Method

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
50	4.90	0.30	0.0	23.8	47.6	28.6
51	4.85	0.35	0.0	04.8	42.9	52.4
83	4.71	0.46	0.0	14.3	47.6	38.1
154	4.71	0.46	0.0	14.3	42.9	42.9
18	4.66	0.48	04.8	28.6	66.7	0.0
73	4.61	0.74	0.0	09.5	38.1	52.4
17	4.61	0.49	0.0	04.8	52.4	42.9
98	4.60	0.59	0.0	04.8	19.0	76.2
8	4.52	0.60	0.0	14.3	76.2	09.5
49	4.52	0.67	0.0	14.3	57.1	28.6
172	4.50	0.82	33.3	09.5	19.0	38.1
52	4.47	0.60	04.8	09.5	28.6	57.1
3	4.47	0.51	0.0	19.0	19.0	61.9
68	4.42	0.59	0.0	33.3	28.6	38.1
176	4.40	0.75	0.0	28.6	14.6	57.1
175	4.40	0.59	0.0	28.6	09.5	61.9
42	4.40	0.50	0.0	04.8	33.3	61.9
85	4.38	0.58	0.0	09.5	47.6	42.9
82	4.33	0.85	04.8	23.8	19.0	52.4
19	4.33	0.96	0.0	09.5	57.1	33.3
81	4.33	0.85	38.1	19.0	04.8	38.1
25	4.33	0.57	0.0	19.0	61.9	19.0
181	4.28	0.64	09.5	42.9	19.0	28.6
149	4.28	0.64	0.0	42.9	23.8	33.3
102	4.28	0.56	0.0	19.0	14.3	66.7
99	4.28	0.46	0.0	19.0	28.6	52.4
91	4.28	0.90	19.0	38.1	33.3	09.5
66	4.28	0.71	09.5	28.6	04.8	57.1
6	4.28	0.71	33.3	19.0	23.8	23.8
195	4.28	0.78	0.0	76.2	09.5	14.3
162	4.28	0.64	0.0	09.5	09.5	81.0
89	4.23	0.70	0.0	09.5	42.9	47.6
36	4.23	0.62	0.0	04.8	38.1	57.1
156	4.23	0.70	0.0	09.5	23.8	66.7
104	4.23	0.53	0.0	19.0	19.0	61.9
96	4.23	0.70	04.8	04.8	28.6	61.9
95	4.23	0.62	0.0	09.5	33.3	57.1

Table 5–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
80	4.23	0.83	04.8	66.7	04.8	23.8
60	4.23	0.76	09.5	85.7	0.0	04.8
29	4.23	0.76	04.8	14.3	47.6	33.3
161	4.23	0.88	0.0	14.3	09.5	76.2
28	4.23	0.62	04.8	04.8	52.4	38.1
173	4.20	0.76	09.5	04.8	33.3	52.4
103	4.19	0.51	0.0	19.0	09.5	71.4
100	4.19	0.60	0.0	28.6	09.5	61.9
198	4.19	0.92	04.8	09.5	33.3	52.4
189	4.19	0.81	09.5	52.4	23.8	14.3
157	4.19	0.74	04.8	19.0	14.3	61.9
155	4.19	0.74	14.3	47.6	28.6	09.5
130	4.19	0.87	0.0	14.3	19.0	66.7
55	4.19	0.81	09.5	19.0	33.3	38.1
13	4.19	0.92	14.3	42.9	33.3	09.5
93	4.19	0.81	0.0	09.5	09.5	81.0
72	4.19	0.87	0.0	23.8	47.6	28.6
65	4.19	0.87	04.8	28.6	14.3	52.4
53	4.19	0.74	09.5	47.6	33.3	09.5
174	4.15	0.67	04.8	23.8	19.0	52.4
190	4.14	0.72	04.8	57.4	23.8	14.3
179	4.14	0.91	23.8	28.6	14.3	33.3
101	4.14	0.57	0.0	28.6	14.3	57.1
97	4.14	0.72	0.0	19.0	09.5	71.4
94	4.14	0.65	0.0	14.3	28.6	57.1
74	4.14	0.96	0.0	23.8	61.9	14.3
31	4.14	0.72	0.0	09.5	42.9	47.6
167	4.10	1.24	04.8	14.3	19.0	61.9
86	4.10	0.71	10.0	15.0	10.0	65.0
5	4.09	0.83	04.8	47.6	47.6	0.0
138	4.09	0.62	0.0	14.3	47.6	38.1
78	4.09	0.76	0.0	09.5	42.9	47.6
33	4.09	0.62	0.0	19.0	52.4	28.6
30	4.09	0.53	19.0	28.6	47.6	04.8
24	4.09	0.76	09.5	61.9	14.3	14.3
177	4.05	0.60	0.0	28.6	19.0	52.4
171	4.05	0.82	33.3	38.1	09.5	19.0
44	4.05	0.82	0.0	42.9	38.1	19.0
191	4.04	0.74	04.8	71.4	09.5	14.3

Table 5–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
183	4.04	0.92	04.8	23.8	09.5	61.9
180	4.04	1.07	09.5	19.0	09.5	61.9
140	4.04	0.66	0.0	14.3	66.7	19.0
76	4.04	0.66	0.0	52.4	33.3	14.3
71	4.04	0.92	0.0	23.8	47.6	28.6
69	4.04	0.89	19.0	61.9	19.0	0.0
59	4.04	0.66	19.0	57.1	09.5	14.3
54	4.04	0.86	09.5	04.8	71.4	14.3
22	4.04	0.86	0.0	14.3	42.9	42.9
188	4.00	0.94	09.5	57.1	19.0	14.3
182	4.00	0.94	09.5	28.6	52.4	09.5
153	4.00	0.83	19.0	04.8	61.9	14.3
150	4.00	0.77	04.8	23.8	23.8	47.6
109	4.00	0.83	0.0	19.0	0.0	81.0
67	4.00	1.00	33.3	38.1	09.5	19.0
27	4.00	0.83	14.3	14.3	33.3	38.1
105	4.00	0.77	0.0	14.3	28.6	61.9
64	4.00	0.70	04.8	09.5	38.1	47.6
56	4.00	1.09	23.8	09.5	52.4	14.3
32	4.00	0.70	0.0	04.8	42.9	52.4
135	3.95	0.49	0.0	14.3	14.3	71.4
112	3.95	0.86	04.8	14.3	09.5	71.4
106	3.95	0.86	0.0	33.3	14.3	52.4
87	3.95	0.66	19.0	19.0	19.0	42.9
139	3.95	0.92	04.8	09.5	33.3	52.4
137	3.95	0.74	0.0	14.3	28.6	57.1
169	3.95	0.94	09.5	14.3	19.0	57.1
143	3.90	0.70	14.3	23.8	33.3	28.6
90	3.90	0.88	04.8	14.3	19.0	61.9
127	3.90	1.04	04.8	04.8	57.1	33.3
132	3.85	0.55	0.0	14.3	04.8	81.0
187	3.85	1.01	14.3	38.1	33.3	14.3
127	3.85	0.79	04.8	42.9	14.3	38.1
84	3.85	0.91	04.8	52.4	14.3	28.6
15	3.85	0.96	04.8	47.6	33.3	14.3
136	3.85	0.79	0.0	09.5	33.3	57.1
131	3.85	0.57	0.0	19.0	09.5	71.4
62	3.85	0.65	09.5	0.0	23.8	66.7

Table 5–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
61	3.85	1.01	14.3	04.8	19.0	61.9
178	3.85	0.87	19.0	23.8	14.3	42.9
170	3.85	1.04	04.8	04.8	09.5	81.0

As in round one, descending mean scores were examined to determine item cutoff mean scores. The 22 items with mean scores of 3.80 and below were eliminated from the study and are presented in Table 6. The 117 items with mean scores of 3.85 and higher were retained for round three.

Table 6.

Curriculum Items Eliminated in Round Two

Item #	Curriculum Statement	M
61	Select appraisal instruments/techniques for counseling	3.80
20	Discuss positive urine screens.	3.76
158	Review legal statues and regulations.	3.76
148	Develop networks with other mental health service providers.	3.76
111	Evaluate counselor's performance.	3.76
45	Involve significant others in aftercare.	3.76
14	Make 12-step assignments.	3.76
1	Assess client's participation in 12-step program.	3.76
163	Counsel clients concerning gender issues.	3.76
165	Coordinate volunteer activities.	3.71
192	Provide client with education concerning harm reduction.	3.71
79	Contract with client regarding treatment rules.	3.71
16	Clarify client's moral/spiritual issues.	3.66
26	Select client's for group participation.	3.66
21	Address violation of agency rules.	3.66
10	Counsel client concerning physical abuse.	3.61
186	Conduct various prevention-oriented addiction strategies.	3.61
164	Provide counseling concerning chronic/communicable disease.	3.61
92	Negotiate with client a time frame for goal attainment.	3.61
75	Inform client about program services.	3.61
168	Provide counseling for clients with disabilities.	3.61
107	Assess programmatic needs.	3.61

Round III

In the third and final round, the revised instrument of 117 retained substance abuse curriculum items was constructed and mailed. Nineteen panelists completed and returned the third round instrument. The means and standard deviations of participant responses concerning the importance ratings for each item were calculated, and are reported in descending order in Table 6. Item mean scores ranged from 3.61 to 4.88. Standard deviations of the rated items ranged from 0.32 to 0.98.

Participants' responses concerning the best educational method for each substance abuse counseling curriculum statement were analyzed for round 3, and are presented in Table 6. The percentages for the educational method participants recommended in round three for each item ranged from 0% to 94.4%. Approximately 91% of the items in round three had percentages of 50% or greater for a particular educational method.

Finally, the item mean scores for importance were examined and the largest gap in item mean scores was found between 3.94 and 3.88. Items with mean scores of 3.88 and lower were eliminated (Table 8) and those with 3.94 were retained in the final list of curriculum items presented in Appendix D.

Table 7.

Descending Mean Scores for Round Three Ratings of Importance and Frequencies of Educational Method

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborstive Lecture	Supervised Practice
51	4.88	0.32	0.0	0.0	38.9	61.1
50	4.83	0.38	0.0	16.7	55.6	27.8
154	4.72	0.46	0.0	05.6	38.9	55.6
73	4.72	0.57	0.0	05.6	22.2	72.2

Table 7–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
83	4.66	0.48	05.6	0.0	55.6	38.9
52	4.61	0.60	0.0	11.1	22.2	66.7
172	4.55	0.61	33.3	0.0	11.1	55.6
98	4.55	0.61	0.0	05.6	11.1	83.3
162	4.44	0.51	0.0	05.6	11.1	83.3
161	44.4	0.61	0.0	05.6	11.1	83.3
81	4.44	0.78	44.4	16.7	0.0	38.9
42	4.44	0.51	0.0	0.0	44.4	55.6
5	4.41	0.50	0.0	52.9	41.2	05.6
17	4.38	0.68	0.0	05.6	66.7	27.8
130	4.38	0.60	0.0	05.6	22.2	72.2
85	4.38	0.60	0.0	11.1	55.6	33.3
3	4.38	0.50	0.0	16.7	11.1	72.2
99	4.33	0.48	0.0	11.1	16.7	72.2
181	4.33	0.59	0.0	50.0	11.1	38.9
176	4.33	0.76	0.0	22.2	05.6	72.2
175	4.33	0.59	0.0	22.2	11.1	66.7
103	4.33	0.48	0.0	05.6	11.1	83.3
49	4.33	0.68	0.0	05.6	72.2	22.2
91	4.33	0.59	27.8	38.9	16.7	16.7
95	4.27	0.46	0.0	0.0	33.3	66.7
82	4.27	0.82	05.6	0.0	27.8	66.7
80	4.27	0.75	0.0	77.8	16.7	05.6
68	4.27	0.57	0.0	22.2	16.7	61.1
29	4.27	0.57	05.6	05.6	61.1	27.8
25	4.27	0.46	0.0	22.2	61.1	16.7
13	4.27	0.57	0.0	77.8	22.2	0.0
8	4.27	0.95	0.0	05.6	88.9	05.6
102	4.27	0.57	0.0	11.1	16.7	72.2
22	4.27	0.57	0.0	16.7	44.4	38.9
18	4.27	0.95	0.0	27.8	72.2	0.0
195	4.22	0.64	05.6	77.8	05.6	11.1
94	4.22	0.54	0.0	0.0	22.2	77.8
93	4.22	0.80	05.6	0.0	11.1	83.3
19	4.22	0.80	0.0	0.0	61.1	38.9
6	4.22	0.80	35.3	05.9	41.2	17.6
171	4.16	0.70	38.9	44.4	05.6	11.1
15	4.16	0.70	05.6	55.6	27.8	11.1

Table 7–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
167	4.16	0.95	0.0	11.1	16.7	72.2
157	4.16	0.70	05.6	0.0	05.6	88.9
149	4.16	0.51	0.0	55.6	27.8	16.7
72	4.16	0.85	0.0	05.6	61.1	33.3
36	4.16	0.61	0.0	05.6	33.3	61.1
179	4.11	0.90	05.6	22.2	11.1	61.1
173	4.11	0.47	0.0	0.0	22.2	77.8
104	4.11	0.47	0.0	11.1	22.2	66.7
101	4.11	0.58	0.0	22.2	16.7	61.1
100	4.11	0.58	0.0	22.2	11.1	66.7
96	4.11	0.47	0.0	0.0	27.8	72.2
89	4.11	0.75	05.6	0.0	33.3	61.1
71	4.11	0.96	0.0	44.4	38.9	16.7
67	4.11	0.90	16.7	55.6	11.1	16.7
66	4.11	0.67	0.0	22.2	05.6	72.2
65	4.11	0.90	0.0	27.8	11.1	61.1
60	4.11	0.58	0.0	94.4	0.0	05.6
55	4.11	0.67	05.6	11.1	38.9	44.4
53	4.11	0.75	0.0	50.0	33.3	16.7
31	4.11	0.67	0.0	0.0	50.0	50.0
30	4.11	0.47	05.6	05.6	22.2	66.7
150	4.05	0.53	11.1	27.8	55.6	05.6
198	4.05	0.72	05.6	0.0	33.3	61.1
189	4.05	0.80	05.6	66.7	16.7	11.1
180	4.05	0.72	0.0	16.7	11.1	72.2
156	4.05	0.72	0.0	05.6	22.2	72.2
155	4.05	0.72	16.7	61.1	11.1	11.1
97	4.05	0.63	0.0	11.1	05.6	83.3
78	4.05	0.53	0.0	44.4	27.8	27.8
74	4.05	0.87	0.0	16.7	72.2	11.1
191	4.00	0.68	0.0	77.8	05.6	16.7
190	4.00	0.68	05.6	66.7	16.7	11.1
134	4.00	0.34	0.0	11.1	11.1	77.8
128	4.00	0.76	05.6	05.6	50.0	38.9
87	4.00	0.59	22.2	11.1	11.1	55.6
76	4.00	0.48	0.0	55.6	33.3	11.1
69	4.00	0.68	0.0	88.9	05.6	05.6
64	4.00	0.59	05.6	05.6	44.4	44.4

Table 7–Continued

	Importance		Educational Method			
Item Number	M	SD	Traditional Lecture	Interactive Lecture	Collaborative Lecture	Supervised Practice
54	4.00	0.94	05.6	05.6	77.8	11.1
33	4.00	0.48	0.0	05.6	66.7	27.8
28	4.00	0.48	05.6	05.6	61.1	27.8
177	4.00	0.34	0.0	16.7	16.7	66.7
174	4.00	0.48	0.0	11.1	11.1	77.8
153	4.00	0.68	11.1	05.6	77.8	05.6
105	3.944	0.53	0.0	05.6	27.8	66.7
86	3.94	0.63	0.0	16.7	11.1	72.2
170	3.94	0.80	0.0	0.0	05.6	94.4
140	3.94	0.42	0.0	0.0	77.8	16.7

Table 8.

Curriculum Items Eliminated in Round Three

Item #	Curriculum Statement	M
110	Provide counselor skill development training.	3.88
187	Promote healthy lifestyle choices	3.88
182	Clarify provider/client roles.	3.88
139	Counsel client concerning sexual abuse.	3.88
178	Inform client of services and cost.	3.88
137	Counsel client regarding marital discord.	3.88
132	Use strategic family counseling techniques.	3.88
63	Use assessment results to aid client in making decisions	3.88
56	Identify client's internal/external resources.	3.88
44	Arrange aftercare services.	3.88
27	Inform clients of group counseling guidelines.	3.88
24	Educate significant others about self-help groups.	3.88
188	Provide client with education regarding disease concept.	3.88
183	Inform client about treatment process.	3.88
143	Inform family members of counseling guidelines	3.88
138	Counsel concerning family member interaction.	3.88
106	Conduct case review to assure quality services.	3.88
131	Use structural family counseling techniques.	3.83
169	Counsel client regarding self-help groups.	3.83
127	Participate in continuing education/skills training.	3.83
109	Provide clinical supervision.	3.83
136	Counsel client regarding culturally specific issues.	3.83
84	Identify source of problem alternatives.	3.83

Table 8–Continued

Item #	Curriculum Statement	M
32	Assist group members with feedback to each other.	3.83
62	Integrate assessment results.	3.83
59	Clarify client's support system.	3.83
90	Participate in staff decision-making process.	3.61

Post hoc Analyses

A multivariate analysis of variance (MANOVA) using the Wilk's Lambda criterion was used to determine if significant differences existed amont the item means in regard to each of the independent variables statements for each of the 89 curriculum items. The variable of race was not included in the MANOVA due a lack of heterogeneity among respondents regarding racial orientation. All respondents, save for one that dropped out of the study after the first round, were Caucasian. Table 9. presents the MANOVA results for the independent variables of job classification, gender, educational level, percentage of education that was substance abuse related, and philosophy of treatment.

Table 9.

Multivariate Analysis of Variance for Comparison of Ratings of Importance Item Mean Scores Between Job Classification, Gender, Educational Level, Percentage of Education Substance Abuse Related , and Philosophy of Treatment.

Source	df	Wilk's Lambda	F	Probability
Job Classification	4	0.10	1.10	0.51
Gender	2	0.37	0.85	0.61
Educational Level	4	0.26	0.49	0.75
Percentage of Education	4	0.18	0.66	0.67
Philosophy of Treatment	6	0.08	0.90	0.61

$p<.05$

As indicated in Table 8, there were no main effects for the independent variables. This indicates that no significant differences existed for ratings of importance for each of the 89 items among respondents with different job classifications[F(4,2) 1.14, p= 0.52], gender [F(2,1) 0.85, p= 0.61], education level [F(4,2) 0.48 p=0.75], percentage of education related to substance abuse counseling [F(4,2) 0.67, p= 0.67], or philosophy of treatment [F(6,2) 1.10, p= 0.61].

CHAPTER 5
DISCUSSION

This study investigated the initial curriculum components necessary for the preparation of graduate-level substance abuse counselors. A review of the literature revealed that while most counselor education programs provide substance abuse counseling courses, no agreed upon curriculum standards existed for instruction in these courses. Therefore, this study sought to address this issue through by attending to two objectives:

1. Compilation of a list of work behaviors associated with the actual practice of substance abuse counseling.
2. Determination of the elements which are most important for the preparation of graduate-level substance abuse counseling and what instructional methods are best for teaching each curriculum component.

A list of work behaviors specifically related to graduate-level substance abuse counseling were generated from previously conducted task analyses. Following the procedures of the Delphi method, a panel of substance abuse counseling experts was selected and asked to respond to three administrations of an evolving questionnaire in order to establish consensus regarding the work behaviors most important for the preparation of graduate-level substance abuse counselors. Twenty-eight (24%) of the substance counseling experts contacted agreed to participate in the study. Expert panelists

were selected from three distinct groups of nationally recognized substance abuse counseling professionals including, nine substance abuse counselors, ten substance abuse counseling program administrators, and nine substance abuse counselor educators. Three mailed questionnaires were used to gather data over an eight month period in 1999.

Ratings of Importance

Examination of the findings of this study indicated that the Delphi technique employed in this study was effective in developing a consensus of opinion among a diverse group of substance abuse counseling experts. The process was also effective in following Tyler's (1949) model for empirical identification of initial curriculum components and educational methods.

Although studies conducted by Von Steen (1996) and NBCC (1995) identified many work behaviors associated with graduate-level substance abuse counselors, responses analyzed in this study indicated that substance abuse counseling experts held differential opinions concerning which are the most important for inclusion in a graduate-level curriculum. That is, the substance abuse counseling experts in this study indicated that only a portion of the potential curriculum components (i.e., work behaviors) were critically important for effective preparation of graduate-level substance abuse counselors. Furthermore, the panelists indicated that some of the curriculum components are more crucial than others. In round one, 96 of the initial 198 items had mean scores ranging from 4.00 to 4.82, which can be interpreted as "very important" to (approaching) "absolutely essential." Forty-three of the item mean scores for ratings of importance ranged from 3.64 to 3.96, which can be interpreted to mean that these items were judged

to extend from "moderately important" to (approaching) "very important." Thirty-nine items fell below the largest gap in round one mean scores (i.e., between 3.64 and 3.57) and were eliminated from further study.

Standard deviations (SD) associated with round one item mean scores set the base line for gauging the degree of consensus of opinion regarding the importance of items. In particular, the larger the SD, the more variance there was among the raw scores (i.e., the ratings), and thus less consensus among panelists for a given item. Conversely, the smaller the SD, the more consensus or agreement among panelists. By examining the range of standard deviations for item mean scores between rounds, it could be determined whether panelist judgments about curriculum items were changing, i.e., if a SD was found to be smaller in round two when compared to its counterpart in round one, it was concluded that the panelists were moving toward greater agreement. Conversely, if a SD were found to be larger in the second round for an given item, it indicated that panelists' judgments were becoming more discordant.

In round one, mean score standard deviations ranged from 0.39 to 1.50. Twenty-six (27%) of items with mean scores of 4.0 or greater had a SD of 0.75 or less and 70 (73%) of these items had a SD of 0.76 or higher. Of those items with mean scores of 3.96 or less, none had a SD of 0.75 or less and 43 (100%) had a SD of 0.79 or higher.

In round two, panelists reviewed previous responses and again rated the importance of each of the retained 139 items. Of these, 96 items were judged to be very important to absolutely essential and had mean scores ranging from 4.00 to 4.90. Twenty-one of the item mean scores representing items judged to be moderately to very important ranged

from 3.85 to 3.95. The largest gap in round two item mean scores fell between 3.80 and 3.85, and therefore 28 items with mean scores of 3.80 and less were eliminated from the study, leaving a total of 117 for consideration in round three.

Comparison of mean score standard deviations in round one to those in round two indicated that panelists moved toward consensus of judgment regarding the importance of items for inclusion in the proposed graduate-level substance abuse counseling curriculum. Round two mean score standard deviations ranged from 0.30 to 1.24, an overall decrease as compared to round one. In particular, 55 (57%) of items with mean scores of 4.0 or greater had a SD equal to 0.75 or higher, which is approximately twice the number of items with lower standard deviations compared to round one. Correspondingly, fewer items in this item mean range had a SD of 0.76 or higher. In fact, only 41 (43%) had a SD of .76 or higher. Panelist judgements regarding items deemed to be moderate to very important also became more consensual. In round two, 33% of items with mean scores in the range of 3.82 to 3.95 had a SD of 0.75 or less, which when compared the lack of mean scores with a low SD in the first round suggested a considerable increase in consensus among panelists.

In round three, panelists were asked to apprise the importance of each of the remaining 117 curriculum items. Analysis of the final round data concluded the study and resulted in 89 definitive curriculum items for the preparation of graduate-level substance abuse counselors (Appendix D). Included were 85 items with mean scores of 4.00 and greater and 4 items with mean scores under 4.00 (all of which had a mean score of 3.94).

The largest gap in round three mean scores fell between 3.88 and 3.94. Twenty-eight items with scores of 3.88 or less were eliminated.

Analyses of third round responses revealed further development of consensus regarding the importance of curriculum items. Comparisons made to data from the first two rounds revealed that the SDs associated with mean scores in round three were substantially lower, ranging from 0.32 to 0.98. Of these, 72 (81%) of items with mean scores of 4.0 or greater had a SD equal to .75 or lower, which when compared to the SDs in round two translates to approximately one-third more items for which panelists developed an increasing amount of consensus. Alternatively, fewer items in this range had a SD of .76 or higher. In round three, only 17 items (19%) had a SD of .76 or higher. The majority of panelist judgments regarding items deemed to be moderate to very important had a SD equal to or less than .75 Of the four remaining items in this category, only one had a SD of .76 or higher.

Initial review of the final list of curriculum components found them to be fitting for the preparation of graduate-level substance abuse counselors for two reasons. First, the final list included counseling knowledge and skills that require considerable (formal, graduate-level) education to learn and could not be mastered by simply achieving personal abstinence from a psychoactive substance. While paraprofessional counselors (i.e., those whose expertise is determined only by personal recovery from a drug) would likely be able to perform item 181 (*determine the signs and symptoms of intoxication and withdrawal),* they clearly would not be prepared to perform a majority of the professional counseling skills identified in this study, including those related to the assessment for suicidal ideation

and dual diagnoses, without far more substantial and formal instruction.

Second, curriculum items included on the final list reflected academic aptitudes characteristically associated with graduate studies. For example, item 67 (*determine DSM-IV classifications)* encompasses a body of knowledge and skills which are taught almost exclusively in a master's level (or higher) program of study. Likewise, item 153 *(evaluate treatment outcomes)* embodies statistical skills normally associated with graduate-level instruction.

Educational Methods

Examination of the findings of this study also indicated that the Delphi technique was effective in developing consensus of opinion among a diverse group of substance abuse counseling experts regarding the best instructional method for each of the identified curriculum components. According to Tyler (1949), this is a crucial factor for establishing an empirically-based curriculum. In each of the three rounds, panelists were asked to select from one of four educational methods: *traditional,* defined as the didactic presentation of information with a minimal of student interaction; *interactive lecture,* similar to traditional lecture, except that instructors encourage and integrate student inquiries into the material presented; *collaborative-interactive lecture*, a method in which the instructor and students jointly use role-playing activities to demonstrate, explore, and practice counseling skills and techniques; and finally *supervised practice,* in which each student learns the particular curriculum component by performing it as an on-site apprentice.

An alternative method for gauging the degree of consensus among panelists regarding the best education method was also used. Educational methods, unlike the ratings of importance, are nominal scales of measurement. Therefore, calculating, reporting, and interpreting mean scores and standard deviations for these types of data would not only be inappropriate, but also would result in erroneous conclusions. Therefore, frequency of panelist selections regarding the best educational method for each of the curriculum items were tabulated and reported as percentages. Increases or decreases in consensus among expert panelists were assessed through comparison of the frequencies or percentages for each item in each round. Degree of consensus was estimated through conventional methods associated with survey research; specifically, percentages above 50% on a particular educational method for a particular item were deemed to indicate consensus among the majority of panelists in regard to the educational method best suited for teaching a particular curriculum component. Similarly, it was concluded that a lower degree of consensus existed among panelists when educational selections for a particular curriculum item were similar for each educational method (e.g., 25%, 25%, 25%, and 25%) or none were over 50%.

In round one, percentages for educational methods ranged from 0.0 to 70.4. Closer examination revealed that 17 (12 %) items had a percentage equal to or greater than 51% and 122 (88%) items had educational method percentages equal to or less than 50%.

Comparison of percentages of round one and two responses verified that a consensus of opinion was developing among the expert panelists regarding best-suited educational method for each curriculum component. The number of items for which a majority of

panelists agreed on the best educational method increased nearly four times between rounds one and two. In round two, 78 items (67%) had one educational method which had been selected by 51% or more of the panelists and 39 items (33%) had percentages of educational method less than 50%.

In round three, the number of items with an educational method selected by 51% or more of panelists increased, which indicated further consensus among panelists. Review of round three responses found that 77 (87%) of the final 89 items had response percentages at 51% or higher. These items were grouped by educational method and are presented in Appendix E. Traditional lecture was not identified as suitable educational method for any of the curriculum components. Interactive lecture was indicated for 14 items, collaborative interactive lecture for 18 items, and supervised practice for 45 items. Consensus of opinion was not realized on only 12 of the final 89 curriculum components, as shown in Table 10.

Table 10.

Curriculum items with less than 50% consensus regarding a specific educational method.

Item #	Item Statement
6	Inform client about the detox process.
7	Use media resources in counseling.
22	Counsel client regarding defense mechanisms.
31	Facilitate conflict resolution among group members.
53	Evaluate existing (pre-counseling) client data.
55	Assess client's motivation for treatment.
78	Establish rapport with family and significant others.
81	Complete release of information forms.
91	Apply ethical/Federal counseling legal standards.
128	Use prevention measures to guard against counselor burn-out.
171	Educate client concerning pharmacological interaction of drugs and medications
181	Determine signs and symptoms of intoxication and withdrawal.

Post hoc Analyses

Following the conclusion of round three, a multivariate analysis of variance (MANOVA) was conducted to determine if there were significant differences in the item means among different panelist variables including job classification, gender, educational level, percentage of education related to substance abuse counseling, and philosophy of treatment. Calculation and application of the Wilk's Lamdba criterion revealed no significant differences existed among the means for any of the final 89 curriculum items for any panelist variables.

Limitations of the Study

Although effort was made to assure that the findings of this study were reliable, limitations exist that should be considered when interpreting the results. In particular, limitations of the study are associated with the respondents and response rate.

Respondents

In order to assure the veracity of responses, the expert panel was assembled only from those who either held at least a master's degree in addition to a nationally recognized substance abuse counseling credential or who managed a nationally accredited substance abuse counseling practice. However, other methods could have been used to identify the substance abuse counseling experts, for example, those with the highest number of studies published in the professional literature or those who had the most clinical experience. An expert panel selected in alternative fashion might have responded very differently to the importance of curriculum components for the preparation of graduate-level substance abuse counselors.

Another limitation is that the expert panel in this study was racially homogeneous. Although the original sample of substance abuse counseling experts included several individuals from racially diverse groups, only one minority member chose to participate in the study. It is conceivable that the lack of racial heterogeneity may have effected the findings of this study. That is, racially diverse expert panelists may have responded differently than Caucasians in this study and thereby modified the consensus of judgment regarding which curriculum items were most important and which educational methods were best suited for teaching the identified curriculum.

Response Rate

The low response rate and attrition associated with the sampling procedures in this study also places limitations on the interpretation of the findings. Even though a good distribution based on personal and professional characteristics existed among panelists, the initial return rate of 24% in round one was low. This result provokes questions about how the findings of the study might have been different if others had participated in the study. Similarly, attrition between the response rounds raises questions about the effect panelist drop-out had upon the findings.

Interpretations

This section presents interpretations of the findings of this study in regard to the curriculum components the expert panelists deemed most important for the preparation of graduate-level substance abuse counselors and the educational methods judged to be best suited for the instruction of each of the identified curriculum components.

Ratings of Importance

Closer examination of the items included in the final list of curriculum components impart critical information about what experts in this study believed were the most important curriculum experiences concerning the preparation of substance abuse counselors. While it was not surprising to find a number of items related to the "basics" of counseling at the top of the list (e.g., item 172, *obtain client consent before initiating treatment*; item 98, *develop a therapeutic relationship with the client;* or item 81, *complete release of information forms*) others were unexpected. For example, several of the presumably foremost items (item 51, *assess client's understanding of his/her substance abuse*; item 50, *determine severity of client's substance abuse problem*; and item 3, *administer substance abuse assessments*) also were high in the rankings which indicates that the assessment of substance abuse is judged to be essential for the edification of future substance abuse counselors. This finding clearly validates the recommendations of Washton (1996), who proposed that effective substance abuse counseling follows an accurate and comprehensive assessment.

Similarly, crisis counseling interventions, especially those skills related to assessment and prevention of suicidal and/or homicidal acts, were deemed to be essential for professionals providing counseling to substance abusers. The high ratings for items 73, *assess potential for client to harm self or others*; 162, *counsel clients with issues related to violence and destruction*; 161, *provide counseling to clients with suicidal/homicidal ideation*; and 130, *use crisis intervention approaches/techniques,* clearly substantiate that the expert panel in this study believed that recognition and

amelioration of potentially life-threatening problems is just as, if not more, important than counseling knowledge and skills routinely associated with substance abuse counseling.

Another unanticipated finding was the inclusion of item 99, *use different treatment approaches*. Over the past several decades, the Minnesota mode (which is a substance abuse treatment approach based almost entirely on the tenets of the 12-steps of Alcoholics Anonymous) has been the prevailing mode of substance abuse counseling in the United States. Other approaches, including cognitive, behavioral, and solution-focused, have engendered empirical support among professional researchers but have not been incorporated frequently into counseling practice or the instruction of substance abuse counselors.

Finally, inclusion of items 67, *determine DSM-IV classifications* and 167, *provide counseling for the dually diagnosed,* make it clear that graduate-level substance abuse counselors should receive instruction so as to be able to identify, classify, and provide effective counseling for substance abuse and co-existing mental disorders, such as schizophrenia, anxiety disorders, major depression, and bipolar disorder.

The items excluded from the final list of curriculum components, like those included, also imparted important knowledge concerning the preparation of graduate-level substance abuse counselors. While it is likely that interpretations could be rendered for many of the 109 items eliminated from the study, some merit specific comment. For example, elimination of almost all items related to spirituality and the 12-steps of Alcoholics or Narcotics Anonymous, compared to inclusion of items associated with substance abuse assessment, diagnosis, and treatment, suggests that the panelists in this

study believed that graduate-level substance abuse counselors should be performing activities more in line with professional counseling rather than those activities associated with 12-step recovery.

It is also important to note that items related to the "disease concept" of addiction were eliminated from this study. Unlike other studies (e.g., Kahle & White, 1991; Margolis, 1993) in which the importance of client understanding of the hypothetical constructs embodied in the disease concept were emphasized, expert panelists in this study (curiously) chose not to include this very familiar substance abuse concept in the final curriculum list. Thus, they indicated that instruction in the disease concept is not of chief importance for the preparation of graduate-level substance abuse counselors.

Educational Methods

Examination of panelist responses for the final list of curriculum components also imparts important information regarding the educational methods deemed best suited for the instruction of each item. Oddly, a review of the findings indicated that among those items for which consensus was achieved, traditional lecture was not included as the best suited method of instruction for any of the identified curriculum items. The results clearly indicated that educational methods that were not didactic but instead emphasized open exchange of questions and information between student and instructor were considered to be the best suited approaches for most items. As noted previously, interactive lecture was judged to be the best educational method for 14 of the items and collaborative-interactive lecture was selected as best for 18 items.

Remarkably, supervised practice was the selected as the best educational method for 45 items. This finding could be interpreted in several ways. For example, expert panelists in this study may have believed that the instruction for these items cannot be addressed adequately in a classroom setting. That is, they may believe that a genuine counseling experience is necessary to learn a particular area of knowledge or skill. For example, counseling students who role play an assessment interview with a fellow student would not necessarily learn the skills required for working with real clients who are often less forthcoming when compared to cooperative classmates.

A more unsettling interpretation , however, also can be made regarding the potential instructional benefits of supervised practice. This finding might mean that expert panelists in this study believed that the instruction of these items is best provided by practicing professionals, and not academic instructors. Even closer review of the items associated with supervised practice finds some support for this conclusion. While it is clear that supervised practice is the most appropriate method of instruction for those curriculum items that require client interaction in order to master fully (such as items 82, *co-construct comprehensive treatment plans*; 52, *conduct pretreatment diagnostic interview*; or 98, *develop a therapeutic relationship with client),* it is not clear that supervised practice is necessarily the most appropriate method of instruction for others that were selected. For example, items 177, *determine appropriate level of care according to the American Society of Addictive Medicine*; 66, *evaluate extent of clients psychological dysfunction*; and 161, *provide counseling to clients with suicidal/homicidal ideation* certainly can and should be taught in the classroom. It is inconceivable that counseling students would be

advised to learn how to manage suicidal clients by practicing on actively suicidal clients without prior instruction.

Post Hoc Analysis

The findings of a post hoc MANOVA quantifiably corroborate that the findings in this study represent a true consensus of opinion among a panel of substance abuse counseling experts. That is, no significant differences in ratings of importance for any of the final 89 items were found among panelist subgroups based on job classification, gender, educational level, percentage of education related to substance abuse counseling, or philosophy of treatment.

Implications

This section presents the implications the findings of this study for the preparation of graduate-level substance abuse counselors. In particular, the findings have significant implications for graduate-level substance abuse counselors in training and substance abuse counselor educators

Substance Abuse Counselors in Training

Past studies have identified literally hundreds of work behaviors associated with the practice of graduate-level substance abuse counseling. However, the findings of this study indicate that some are more important than others. Therefore, it is recommended that individuals who aspire to be proficient as master's-level substance abuse counselors should enroll in counselor preparation programs that provide instruction based on the curriculum components deemed to be most important. Such training should include coverage of at least, crisis intervention, relapse prevention, and cognitive-behavioral therapy.

Substance Abuse Counselor Educators

The findings of this study also have important implications for substance abuse counselor educators. For example, counselor educators may need to review the findings of this study in regard to the curriculum components they include in the substance abuse counselor preparation courses they teach and/or offer in their programs. Clearly, substance abuse counseling professionals deem some knowledge areas and skills to be more important than others. Accordingly, counselor educators should review course content and replace curriculum topics not found to be essential with those deemed to be most important. For example, it would be prudent for substance abuse counselor educators to provide instruction regarding relapse prevention, crisis intervention strategies, and assessment of and counseling for suicidal and homicidal clients and to limit or eliminate instruction regarding the disease concept of addiction, spirituality counseling, and moderation management.

Educational Methods

This study also has implications for the educational methods substance abuse counselor educators use to instruct students. Expert panelists did not find traditional lecture to be a suitable method for the instruction of any curriculum item. Presumably, instruction based solely on a didactic presentation of substance abuse counseling information was judged to be less effective than other, "experiential" methods. Panelists thus selected educational methods that emphasized exchange of information between student and instructor through the use of experiential activities (e.g., role-playing). Therefore, counselor educators may find it necessary to adjust teaching styles and

implement different ways of teaching educational objectives. For example, counselor educators might replace didactic lectures about the assessment of substance abuse with a lesson that fosters students' participation by having students pair up and role play an assessment session.

Further implications for substance abuse counselor educators are rooted in fact that expert panelists in this study identified supervised practice as the most suitable educational method for a majority of the curriculum items. Many of the items thus evaluated also are ones that were deemed to be most important. Therefore, it seems improper for counselor educators to "farm out" all supervision of substance abuse counselors in training to outside agencies and more appropriate for counselor educators to become more involved in the supervision and training of their students.

Finally, the findings of this study also have implications for the Council for Accreditation of Counseling and Related Educational Programs (CACREP) regarding the preparation of substance abuse counselors. To date, CACREP allows counselors in training to complete a course on substance abuse as an elective, but does not delineate curriculum experiences for instruction as it does for other instructional areas (e.g., career or gerontological counseling). Therefore, it is advisable for CACREP to require accredited institutions to provide substance abuse counseling course work based on curriculum components found to be most important.

Recommendations for Future Research

This study gathered information in regard to curriculum items that substance abuse counseling experts judged to be the most important for the preparation of graduate-level

substance abuse counselors. While other studies in the literature indicated that the sample size and methods of verifying expert status used in this study were sufficient, future studies should involve a larger sample. Of principal concern is whether differences exist for substance abuse counseling experts who did not respond to this study, live in other areas of the country, are of a racial identity other than Caucasian, or are judged to be experts based on other criteria.

It is also recommended that future studies utilize a sub-panel of experts to review the initial list of curriculum items for the purpose of clarifying and removing items that have similar meaning. Many panelists in this study communicated that they were confused and/or frustrated by the wording and/or the meaning of some items. Review of the data revealed that the items that panelists indicated were poorly worded or difficult to interpret were given lower ratings of importance. Future studies should use a subgroup to review and reword items in order to improve the discriminative ability of the items and thereby alleviate these types of problems.

Future research that investigates the relationship between counselor performance and counseling outcomes could substantiate the veracity of the findings of this study. In particular, a study designed to examine the performance of two groups of substance abuse counselors, those who had been prepared using the curriculum items in this study verses those prepared using a different curriculum, would provide important information regarding the veracity of the findings of this study.

Finally, the purpose of this study was to identify the *initial* curriculum components for the preparation of graduate-level substance abuse counselors. The current study

provided information regarding which curriculum items were most important. However, the results do not indicate which items should be grouped together to form a specific substance abuse counseling course. Therefore, it is recommended that further research be conducted using a larger sample of substance abuse professionals to refine and cluster the curriculum items into suggested courses of study.

Summation

This study investigated the initial curriculum components for the preparation of graduate-level substance abuse counselors. The Delphi method was used to follow Tyler's (1949) model for the empirical development of an effective curriculum. An expert panel comprised of 28 individuals from three groups of substance abuse counseling professionals (graduate-level substance abuse counselors, substance abuse counselor administrators, and substance abuse counselor educators) responded to three rounds (administrations) of an evolving questionnaire. They indicated which of 198 work behaviors associated with substance abuse counseling were most important for inclusion in a curriculum for the preparation of graduate-level substance abuse counselors. Panelists also indicated the educational method best-suited for the instruction of each potential item. Final analyses resulted in a list of 89 curriculum items that the panelists agreed were most important as well as the educational method best suited for instruction of each item. A post hoc, mulitivariate analysis of variance (MANOVA) revealed no significant differences existed among panelist subgroups, job classification, gender, ethnicity, educational level, percentage of education related to substance abuse counseling, and philosophy of treatment, thus supporting consensus of opinion among the respondents.

APPENDIX A
FUNDAMENTAL CURRICULUM COMPONENTS FOR THE PREPARATION OF GRADUATE-LEVEL SUBSTANCE ABUSE COUNSELORS QUESTIONNAIRE

Fundamental Curriculum Components for Preparing Graduate-Level Substance Abuse Counselors Questionnaire

INSTRUCTIONS

Please leave this sheet attached to the survey

Step 1

Print your name and return address here:

_____

_____

_____

_____

Even though a panelist's responses will always remain confidential, it is necessary for panelists to provide their name and address on the survey so that an analysis of their previous responses may be return mailed to them.

Step 2

Please indicate by circling a number beside each of the 198 items to indicate how important each behavior/task is for educating competent ***MASTER'S-LEVEL*** substance abuse counselors. For example, if you think that teaching counseling students how to perform the task listed as *assess a client's drug history* is **extremely important** for educating master's-level substance abuse counselors, please mark the corresponding number (which is this example would be either a 4 or 5). If, on the other hand, you believe that teaching students how to *assess a client's drug history* is **not important** for educating master's-level substance abuse counselors, then you would indicate this by marking the corresponding number (which in this example would be a 1 or 2).

Step 3

For the same list of 198 items, **please indicate by circling a number** for which ***EDUCATIONAL METHOD*** is best for teaching that particular work behavior. Participants may select from the following: hope

Traditional Lecture- the instructor presents information from a fixed outline with or without the aid of audio/visual equipment with little or no interaction/questions from the student. For example, an instructor defines the term assessment and sequentially discusses the procedure step-by-step. Student's questions are limited to the last ten minutes of class.

Interactive Lecture- is the same as traditional lecture except that the instructor encourages student participation and uses pupil questions and comments to guide the presentation of instructional content. For example, an instructor using this method might define the term assessment and then weave "how to do an assessment" around the student's practicum assessment experiences.

Collaborative Interactive - the instructor and students jointly use role-playing activities to demonstrate, explore, and practice counseling skills and techniques. For example, the instructor poses as an DUI offender who has just been referred to a counselor. Rather than role-play with one student in front of the class, all students take turns randomly role-playing an assessment with the instructor.

Supervised Practice- student's learn to master a particular counseling skill with the help of a supervisor by performing the task while working on-site as an apprentice with real clients.

Step 4

Complete the informational items in Section 2. and list any important educational components you believe were not on this list.

Step 5

Sign the informed consent form and return it along with the completed questionnaire in the stamped, self-addressed envelope no later **May 27, 1999.**

Thank You!

Fundamental Curriculum Components for the Preparation of Graduate-Level Substance Abuse Counselors

How important is the instruction of this task for the education of master's-level substance abuse counselors?

5=absolutely essential
4=very important
3=moderately important
2=slightly important
1=not important

1= traditional lecture
2= interactive lecture
3= collaborative experiential
4= supervised practice

What method of instruction is best for teaching this particular knowledge/skill?

1.	Assess client's participation in 12-step program	1	2	3	4	5	1	2	3	4
2.	Assess spiritual functioning	1	2	3	4	5	1	2	3	4
3.	Administer substance abuse assessments	1	2	3	4	5	1	2	3	4
4.	Use self-report personality inventories	1	2	3	4	5	1	2	3	4
5.	Inform family of family dynamics/roles	1	2	3	4	5	1	2	3	4
6.	Inform client about detox process	1	2	3	4	5	1	2	3	4
7.	Use media resources in counseling	1	2	3	4	5	1	2	3	4
8.	Counsel client concerning lifestyle change	1	2	3	4	5	1	2	3	4
9.	Counsel client concerning human sexuality	1	2	3	4	5	1	2	3	4
10.	Counsel client concerning physical abuse	1	2	3	4	5	1	2	3	4
11.	Counsel client concerning spiritual issues	1	2	3	4	5	1	2	3	4
12.	Provide appropriate home-work assignments	1	2	3	4	5	1	2	3	4
13.	Educate client about self-help groups	1	2	3	4	5	1	2	3	4
14.	Make 12-step assignments	1	2	3	4	5	1	2	3	4
15.	Process 12-step assignments	1	2	3	4	5	1	2	3	4
16.	Clarify client's moral/spiritual issues	1	2	3	4	5	1	2	3	4
17.	Facilitate client exploration of consequences of substance abuse	1	2	3	4	5	1	2	3	4

How important is the instruction of this task for the education of master's-level substance abuse counselors?

5=absolutely essential
4=very important
3=moderately important
2=slightly important
1=not important

1= traditional lecture
2= interactive lecture
3= collaborative experiential
4= supervised practice

What method of instruction is best for teaching this particular knowledge/skill?

18. Educate client about consequences of drug abuse	1 2 3 4 5	1 2 3 4
19. Provide impetus for client to remain in treatment	1 2 3 4 5	1 2 3 4
20. Discuss positive urine screen	1 2 3 4 5	1 2 3 4
21. Address violation of agency rules	1 2 3 4 5	1 2 3 4
22. Counsel client regarding defense mechanisms	1 2 3 4 5	1 2 3 4
23. Conduct former client follow-up activities	1 2 3 4 5	1 2 3 4
24. Educate significant others about self-help groups	1 2 3 4 5	1 2 3 4
25. Counsel significant others concerning substance abuse	1 2 3 4 5	1 2 3 4
26. Select clients for group participation	1 2 3 4 5	1 2 3 4
27. Inform clients of group counseling guidelines	1 2 3 4 5	1 2 3 4
28. Systematically observe group members behaviors	1 2 3 4 5	1 2 3 4
29. Identify harmful group behaviors	1 2 3 4 5	1 2 3 4
30. Evaluate progress toward group goals	1 2 3 4 5	1 2 3 4
31. Facilitate conflict resolution among group participants	1 2 3 4 5	1 2 3 4
32. Assist with group members feedback to each other	1 2 3 4 5	1 2 3 4
33. Determine group counseling effectiveness	1 2 3 4 5	1 2 3 4
34. Use structured activities during group counseling	1 2 3 4 5	1 2 3 4

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4= supervised practice

What method of instruction is best for teaching this particular knowledge/skill?

35. Use leader-centered group counseling techniques	1	2	3	4	5	1	2	3	4
36. Use group-centered group counseling techniques	1	2	3	4	5	1	2	3	4
37. Facilitate client's development of job-search skills	1	2	3	4	5	1	2	3	4
38. Assist disabled client's with assignments	1	2	3	4	5	1	2	3	4
39. Monitor drug screening test results	1	2	3	4	5	1	2	3	4
40. Communicate with funding sources regarding client's treatment	1	2	3	4	5	1	2	3	4
41. Investigate half-way house alternatives	1	2	3	4	5	1	2	3	4
42. Assist client's in constructing effective support systems	1	2	3	4	5	1	2	3	4
43. Assist client in obtaining a temporary sponsor	1	2	3	4	5	1	2	3	4
44. Arrange aftercare services	1	2	3	4	5	1	2	3	4
45. Involve significant others in aftercare services	1	2	3	4	5	1	2	3	4
46. Facilitate return to work conferences	1	2	3	4	5	1	2	3	4
47. Educate non-treatment staff about substance abuse	1	2	3	4	5	1	2	3	4
48. Participate in self-help group activities	1	2	3	4	5	1	2	3	4
49. Determine previous/current use of different substances	1	2	3	4	5	1	2	3	4
50. Determine severity of client's substance abuse problem	1	2	3	4	5	1	2	3	4
51. Assess client's understanding of his/her substance dependency	1	2	3	4	5	1	2	3	4

Fundamental Curriculum Components for the Preparation of Graduate-Level Substance Abuse Counselors

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52.	Conduct pretreatment diagnostic interview	1	2	3	4	5	1	2	3	4
53.	Evaluate existing (precounseling) client data	1	2	3	4	5	1	2	3	4
54.	Discuss client's reasons for seeking treatment	1	2	3	4	5	1	2	3	4
55.	Assess client's motivation for treatment	1	2	3	4	5	1	2	3	4
56.	Identify client's internal/external resources	1	2	3	4	5	1	2	3	4
57.	Assess client's educational history	1	2	3	4	5	1	2	3	4
58.	Assess for learning disabilities	1	2	3	4	5	1	2	3	4
59.	Clarify client's support system	1	2	3	4	5	1	2	3	4
60.	Assess client's family history of addictive disorders	1	2	3	4	5	1	2	3	4
61.	Select appraisal instruments/techniques for counseling	1	2	3	4	5	1	2	3	4
62.	Integrate assessment results	1	2	3	4	5	1	2	3	4
63.	Use assessment results to aid client in making decisions	1	2	3	4	5	1	2	3	4
64.	Use assessment results to aid in intervention selections	1	2	3	4	5	1	2	3	4
65.	Use nontest appraisal techniques	1	2	3	4	5	1	2	3	4
66.	Evaluate extent of client's psychological dysfunction	1	2	3	4	5	1	2	3	4
67.	Determine DSM-IV classifications	1	2	3	4	5	1	2	3	4
68.	Evaluate client need for further assessment	1	2	3	4	5	1	2	3	4

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What method of instruction is best for teaching this particular knowledge/skill?

69. Obtain client's medical history	1 2 3 4 5	1 2 3 4
70. Assist client in understanding of test results	1 2 3 4 5	1 2 3 4
71. Determine if client will be admitted for treatment	1 2 3 4 5	1 2 3 4
72. Evaluate need for client referral for treatment	1 2 3 4 5	1 2 3 4
73. Assess potential for client to harm self/others	1 2 3 4 5	1 2 3 4
74. Determine necessity for an intervention	1 2 3 4 5	1 2 3 4
75. Inform client about program services	1 2 3 4 5	1 2 3 4
76. Clarify family counseling goals	1 2 3 4 5	1 2 3 4
77. Explore client's educational opportunities	1 2 3 4 5	1 2 3 4
78. Establish rapport with family and significant others	1 2 3 4 5	1 2 3 4
79. Contract with client regarding treatment rules	1 2 3 4 5	1 2 3 4
80. Inform client about ethical standards and practice	1 2 3 4 5	1 2 3 4
81. Complete release of information forms	1 2 3 4 5	1 2 3 4
82. Co-construct comprehensive treatment plans	1 2 3 4 5	1 2 3 4
83. Establish counseling goals and objectives	1 2 3 4 5	1 2 3 4
84. Identify source of problem alternatives	1 2 3 4 5	1 2 3 4
85. Assist client in setting short-term and long-term goals	1 2 3 4 5	1 2 3 4

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What method of instruction is best for teaching this particular knowledge/skill?

86.	Function as a member of an interdisciplinary treatment team	1	2	3	4	5	1	2	3	4
87.	Observe client for medication side-effects	1	2	3	4	5	1	2	3	4
88.	Provide client information when authorized	1	2	3	4	5	1	2	3	4
89.	Assess client's strengths and limitations	1	2	3	4	5	1	2	3	4
90.	Participate in staff decision-making processes	1	2	3	4	5	1	2	3	4
91.	Apply ethical/or Federal counseling legal standards	1	2	3	4	5	1	2	3	4
92.	Negotiate with client a time frame for goal attainment	1	2	3	4	5	1	2	3	4
93.	Implement treatment plans	1	2	3	4	5	1	2	3	4
94.	Evaluate client's movement toward counseling goals	1	2	3	4	5	1	2	3	4
95.	Assist client recognize strengths and weaknesses	1	2	3	4	5	1	2	3	4
96.	Assist client in evaluation of progress in treatment	1	2	3	4	5	1	2	3	4
97.	Self-evaluate counseling progress	1	2	3	4	5	1	2	3	4
98.	Develop a therapeutic relationship with client	1	2	3	4	5	1	2	3	4
99.	Utilize different treatment approaches	1	2	3	4	5	1	2	3	4
100.	Use behavioral-oriented counseling techniques	1	2	3	4	5	1	2	3	4
101.	Use cognitive-oriented counseling techniques	1	2	3	4	5	1	2	3	4
102.	Reframe client's problems	1	2	3	4	5	1	2	3	4

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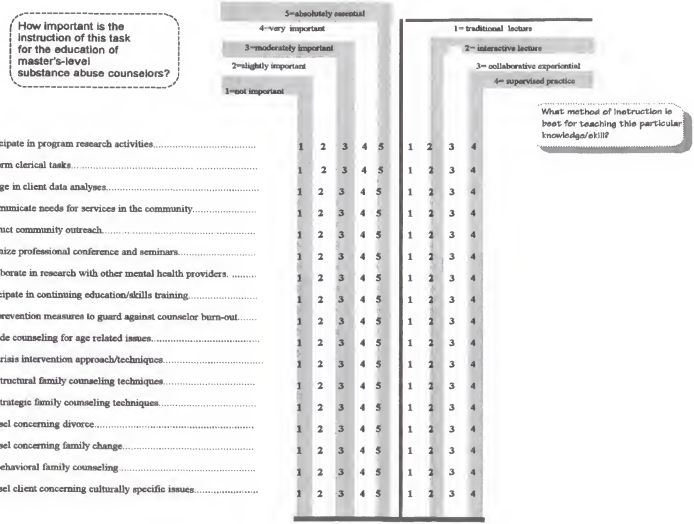
What method of instruction is best for teaching this particular knowledge/skill?

103.	Assess client's readiness for discharge	1	2	3	4	5	1	2	3	4
104.	Prepare client for termination from counseling	1	2	3	4	5	1	2	3	4
105.	Facilitate client's development of decision-making skills	1	2	3	4	5	1	2	3	4
106.	Conduct case reviews to assure quality services	1	2	3	4	5	1	2	3	4
107.	Assess programmatic needs	1	2	3	4	5	1	2	3	4
108.	Establish programmatic service goals	1	2	3	4	5	1	2	3	4
109.	Provide clinical supervision	1	2	3	4	5	1	2	3	4
110.	Provide administrative supervision	1	2	3	4	5	1	2	3	4
111.	Evaluate counselor's performance	1	2	3	4	5	1	2	3	4
112.	Provide counselor skill-development training	1	2	3	4	5	1	2	3	4
113.	Coordinate volunteer activities	1	2	3	4	5	1	2	3	4
114.	Mediate treatment staff/client conflict	1	2	3	4	5	1	2	3	4
115.	Administer treatment program	1	2	3	4	5	1	2	3	4
116.	Allocate financial resources for treatment program	1	2	3	4	5	1	2	3	4
117.	Develop program-related reports	1	2	3	4	5	1	2	3	4
118.	Conduct fund-raising activities for program development	1	2	3	4	5	1	2	3	4
119.	Provide orientation to new personnel	1	2	3	4	5	1	2	3	4

Fundamental Curriculum Components for the Preparation of Graduate-Level Substance Abuse Counselors



120.	Participate in program research activities	1	2	3	4	5	1	2	3	4
121.	Perform clerical tasks	1	2	3	4	5	1	2	3	4
122.	Engage in client data analyses	1	2	3	4	5	1	2	3	4
123.	Communicate needs for services in the community	1	2	3	4	5	1	2	3	4
124	Conduct community outreach	1	2	3	4	5	1	2	3	4
125.	Organize professional conference and seminars	1	2	3	4	5	1	2	3	4
126.	Collaborate in research with other mental health providers.	1	2	3	4	5	1	2	3	4
127.	Participate in continuing education/skills training	1	2	3	4	5	1	2	3	4
128.	Use prevention measures to guard against counselor burn-out	1	2	3	4	5	1	2	3	4
129.	Provide counseling for age related issues	1	2	3	4	5	1	2	3	4
130.	Use crisis intervention approach/techniques	1	2	3	4	5	1	2	3	4
131.	Use structural family counseling techniques	1	2	3	4	5	1	2	3	4
132.	Use strategic family counseling techniques	1	2	3	4	5	1	2	3	4
133.	Counsel concerning divorce	1	2	3	4	5	1	2	3	4
134	Counsel concerning family change	1	2	3	4	5	1	2	3	4
135.	Use behavioral family counseling	1	2	3	4	5	1	2	3	4
136.	Counsel client concerning culturally specific issues	1	2	3	4	5	1	2	3	4

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What method of instruction is best for teaching this particular knowledge/skill?

137.	Counsel concerning marital discord	1	2	3	4	5	1	2	3	4
138.	Counsel concerning family member interaction	1	2	3	4	5	1	2	3	4
139	Counsel client concerning sexual abuse	1	2	3	4	5	1	2	3	4
140.	Develop family conflict resolution strategies	1	2	3	4	5	1	2	3	4
141.	Use multigenerational family counseling techniques	1	2	3	4	5	1	2	3	4
142.	Advocate for client's interest with courts/employer	1	2	3	4	5	1	2	3	4
143.	Inform family members of family counseling guidelines	1	2	3	4	5	1	2	3	4
144.	Educate non-treatment staff about counseling services	1	2	3	4	5	1	2	3	4
145.	Develop appraisal instrument/technique	1	2	3	4	5	1	2	3	4
146.	Evaluate media resources	1	2	3	4	5	1	2	3	4
147.	Engage in professional/community public relations	1	2	3	4	5	1	2	3	4
148.	Develop networks with other mental health service providers	1	2	3	4	5	1	2	3	4
149.	Participate in personal and professional development (e.g., review ethics, read current professional literature, therapy)	1	2	3	4	5	1	2	3	4
150.	Collaborate with referral systems	1	2	3	4	5	1	2	3	4
151.	Read current professional literature	1	2	3	4	5	1	2	3	4
152.	Review ethical standards	1	2	3	4	5	1	2	3	4
153.	Evaluate treatment outcomes	1	2	3	4	5	1	2	3	4

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What method of instruction is best for teaching this particular knowledge/skill?

154	Counsel client regarding relapse prevention	1	2	3	4	5	1	2	3	4
155	Educate clients about different types of addiction (drugs only)	1	2	3	4	5	1	2	3	4
156.	Interview client's family and/or significant other(s)	1	2	3	4	5	1	2	3	4
157.	Assess match between client's needs and program services	1	2	3	4	5	1	2	3	4
158	Review legal statutes and regulations	1	2	3	4	5	1	2	3	4
159.	Write for publication	1	2	3	4	5	1	2	3	4
160.	Develop own professional goals and objectives	1	2	3	4	5	1	2	3	4
161.	Provide counseling to clients with suicidal/homicidal ideation	1	2	3	4	5	1	2	3	4
162.	Counsel clients with issues related to violence/destruction	1	2	3	4	5	1	2	3	4
163.	Counsel clients concerning gender issues	1	2	3	4	5	1	2	3	4
164.	Provide counseling concerning chronic/communicable illness	1	2	3	4	5	1	2	3	4
165.	Provide counseling for clients with disabilities	1	2	3	4	5	1	2	3	4
166.	Counsel clients concerning pregnancy issues	1	2	3	4	5	1	2	3	4
167.	Provide counseling for the dually diagnosed client	1	2	3	4	5	1	2	3	4
168.	Counsel client concerning leisure/recreation	1	2	3	4	5	1	2	3	4
169	Counsel client concerning self-help groups	1	2	3	4	5	1	2	3	4
170.	Provide individual/group and /or crisis counseling for client/family members	1	2	3	4	5	1	2	3	4

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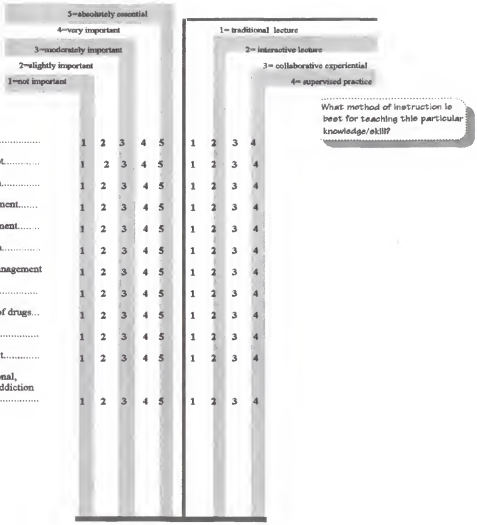
What method of instruction is best for teaching this particular knowledge/skill?

171.	Educate client concerning pharmacological interaction of drugs and medications	1	2	3	4	5	1	2	3	4
172.	Obtain client's informed consent before initiating treatment	1	2	3	4	5	1	2	3	4
173.	Conduct mental status examination	1	2	3	4	5	1	2	3	4
174.	Complete diagnostic summary including psychological, physician and nursing assessments	1	2	3	4	5	1	2	3	4
175.	Construct comprehensive care/treatment plans including goals, objectives, strategies, time frame, discharge, and aftercare plan	1	2	3	4	5	1	2	3	4
176.	Evaluate client intake data	1	2	3	4	5	1	2	3	4
177.	Determine appropriate level of care according to American Society of Addictive Medicine	1	2	3	4	5	1	2	3	4
178.	Inform client of services and cost	1	2	3	4	5	1	2	3	4
179.	Provide other referral sources if not admitted	1	2	3	4	5	1	2	3	4
180.	Conduct pretreatment diagnostic interview	1	2	3	4	5	1	2	3	4
181.	Determine signs and symptoms of intoxication and withdrawal	1	2	3	4	5	1	2	3	4
182.	Clarify provider/client roles	1	2	3	4	5	1	2	3	4
183.	Inform client about treatment process	1	2	3	4	5	1	2	3	4
184.	Counsel client concerning issues related to alternative lifestyles	1	2	3	4	5	1	2	3	4
185.	Prepare age specific prevention materials	1	2	3	4	5	1	2	3	4
186.	Conduct various prevention-oriented addiction strategies	1	2	3	4	5	1	2	3	4

Fundamental Curriculum Components for the Preparation of Graduate-Level Substance Abuse Counselors



187.	Promote healthy lifestyle choices	1	2	3	4	5	1	2	3	4
188.	Provide client with education concerning disease concept	1	2	3	4	5	1	2	3	4
189.	Provide client with education concerning cross addiction	1	2	3	4	5	1	2	3	4
190.	Provide client with education concerning stress management	1	2	3	4	5	1	2	3	4
191.	Provide client with education concerning anger management	1	2	3	4	5	1	2	3	4
192.	Provide client with education concerning harm reduction	1	2	3	4	5	1	2	3	4
193.	Provide client with education concerning moderation management	1	2	3	4	5	1	2	3	4
194.	Provide client with education concerning nutrition	1	2	3	4	5	1	2	3	4
195.	Educate client about physical and psychological effects of drugs	1	2	3	4	5	1	2	3	4
196.	Evaluate prevention program effectiveness	1	2	3	4	5	1	2	3	4
197.	Develop prevention programs based on needs assessment	1	2	3	4	5	1	2	3	4
198.	Assess biopsychosocial needs including client's educational, vocational, addictions, psychiatric, sexual, family, and addiction histories	1	2	3	4	5	1	2	3	4

APPENDIX B
COVER LETTER/INFORMED CONSENT

Dear Participant,

I am a doctoral candidate in the Department of Counselor Education at the University of Florida. As a part of my degree, I am conducting research, the purpose of which is to identify the initial curriculum components of a curriculum for preparing graduate-level substance abuse counselors. I am asking you to participate in this study because you have been identified as a knowledgeable professional in the area of alcohol and other drug counseling. Participants in this study will take part in a three round Delphi procedure, whereby each person will be asked to individually rate how important curriculum components are from a list of approximately 200 items. In addition, participants will be asked to indicate what teaching method would best facilitate learning of the identified curriculum objectives. After the first round, mean scores for each item will be calculated and the results will be returned so participants have the chance to modify their previous responses.

This procedure will be continued until a certain degree of consensus is achieved among participants concerning a curriculum for preparing graduate level substance abuse counselors.

Your identity will remain confidential during the course of the Delphi. At no time will anyone, including other participants, know how you rated items, nor will your identity be revealed in the final manuscript.

There are no anticipated risks, compensation or direct benefits to you as a participant in this study. You are entirely free to withdraw your consent to participate and discontinue in the study at any time without any consequence to you or your institution.

If you have further questions regarding this study, please feel free to contact me at (352) 395-7555 or my faculty advisor, Larry C. Loesch Ph.D., at (352) 392-0731 x225. Questions regarding the rights of research participants may be directed to the University of Florida Institutional Review Board at (352) 392-0433.

Please sign and return this copy of the letter in the enclosed envelope. The second copy is provided for your personal records. By signing this document, you give me permission to report your responses anonymously in the final transcript submitted as part of my doctoral course work.

Appreciatively,

David Whittinghill

I have read the preceding description about the Delphi study for identifying curriculum standards for substance abuse counselors. I voluntarily agree to participate in the study and have a copy of this document in my possession.

_____ _____

Signature of Participant Date

APPENDIX C
FOLLOW-UP LETTER

May 15, 1999

Dear Substance Abuse Professional,

Several days ago, you were sent a questionnaire as part of a study to determine the curriculum standards for educating master's level, substance abuse counselors. If you have completed the survey and returned it, thank you for your contribution to this very important project.

If you have not completed the questionnaire, please do so and return it as soon as possible. This study will help counselor educators better understand the subject matter that is essential for instructing future graduate-level substance abuse counselors.

I am very aware that many demands are made upon your valuable time, however, it is my hope that you will take time to participate in this much needed study. If you have questions or comments, please feel free to contact me by phone at either 352-395-7555 or 352-392-0731 x227 or by email at wdw2@ufl.edu

Thank you for your help.

Sincerely,

David Whittinghill
Doctoral Candidate
Department of Counselor Education
University of Florida

APPENDIX D
FINAL LIST OF CURRICULUM ITEMS

Item #		Item statement
1.	51	Assess client's understanding of his/her substance dependency
2.	50	Determine severity of client's substance abuse problem.
3.	154	Counsel client regarding relapse prevention.
4.	73	Assess potential for client to harm self/others.
5.	83	Establish counseling goals and objectives.
6.	52	Conduct pretreatment diagnostic interview.
7.	172	Obtain client consent before initiating treatment.
8.	98	Develop a therapeutic relationship with client.
9.	162	Counsel clients with issues related to violence/destruction
10.	161	Provide counseling to clients with suicidal/homicidal ideation.
11.	81	Complete release of information forms.
12.	42	Assist client's in constructing effective support systems.
13.	5	Inform family of family dynamics/roles.
14.	17	Facilitate client exploration of consequences of substance abuse.
15.	130	Use crisis intervention approach/techniques.
16.	85	Assist client in setting short-term and long-term goals.
17.	3	Administer substance abuse assessments.
18.	99	Utilize different treatment approaches.
19.	181	Determine signs and symptoms of intoxication and withdrawal.
20.	176	Evaluate client intake data.
21.	175	Construct comprehensive care/treatment plans, including goals, objectives, strategies, time frame, discharge, and aftercare plan.

Item #		Item statement
22.	103	Assess client's readiness for discharge.
23.	49	Determine previous/current use of different substances.
24.	91	Apply ethical/or Federal counseling legal standards.
25.	95	Assist client to recognize strengths and weaknesses.
26.	82	Co-construct comprehensive treatment plans.
27.	80	Inform client about ethical standards and practice
28.	68	Evaluate client need for further assessment.
29.	29	Identify harmful group behaviors.
30.	25	Counsel significant others concerning substance abuse.
31.	13	Educate client about self-help groups.
32.	8	Counseling client concerning life style change.
33.	102	Reframe client's problems.
34.	22	Counsel client regarding defense mechanisms.
35.	18	Educate client about consequences of drug abuse.
36.	195	Educate client about physical and psychological effects of drugs.
37.	94	Evaluate client's movement toward counseling goals.
38.	93	Implement treatment plans.
39.	19	Provide impetus for client to remain in treatment.
40.	6	Inform client about detox process.
41.	171	Educate client concerning pharmacological interaction of drugs and medications.

Item #		Item statement
42.	15	Process 12-step assignments.
43.	167	Provide counseling for the dually-diagnosed client.
44.	157	Assess match between client's needs and program services.
45.	149	Participate in personal and professional development (e.g., review ethics, read current professional literature).
46.	72	Evaluate need for client referral for treatment.
47.	36	Use group-centered group counseling techniques.
48.	179	Provide other resources if not admitted.
49.	173	Conduct mental status examination.
50.	104	Prepare client for termination from counseling.
51.	101	Use cognitive-oriented counseling techniques.
52.	100	Use behavioral-oriented counseling techniques.
53.	96	Assist client in evaluation of progress in treatment.
54.	89	Assess client's strengths and limitations.
55.	71	Determine if client will be admitted for treatment.
56.	67	Determine DSM- IV classifications.
57.	66	Evaluate extent of client's psychological dysfunction.
58.	65	Use non-test appraisal techniques.
59.	60	Assess client's family history of addictive disorders.
60.	55	Assess client's motivation for treatment.
61.	53	Evaluate existing (pre-counseling) client data

Item #		Item statement
62.	31	Facilitate conflict resolution among group participants.
63.	30	Evaluate progress toward treatment goals.
64.	150	Collaborate with referral systems.
65.	198	Assess biopsychosocial needs, including client's educational, vocational, addictions, psychiatric, sexual, family, and addiction histories.
66.	189	Provide client with education concerning cross addiction.
67.	180	Conduct pretreatment diagnostic interview.
68.	156	Interview client's family and/or significant other(s)
69.	155	Educate client about different types of addiction (drugs only).
70.	97	Self-evaluate counseling progress
71.	78	Establish rapport with family and significant others.
72.	74	Determine necessity for an intervention.
73.	191	Provide client with education concerning anger management.
74.	190	Provide client with education concerning stress management.
75.	134	Counsel concerning family change.
76.	128	Use prevention measures to guard against counselor burn-out.
77.	87	Observe client for medication side-effects.
78.	76	Clarify family counseling goals.
79.	69	Obtain client medical history.
80.	64	Use assessment results to aid in intervention selections.
81.	54	Discuss client's reasons for seeking treatment.

Item #	Item statement
82. 33	Determine group counseling effectiveness.
83. 28	Systematically observe group members behaviors.
84. 177	Determine appropriate level of care according to American Society of Addictive Medicine.
85. 153	Evaluate treatment outcomes.
86. 105	Facilitate client's development of decision-making skills.
87. 86	Function as a member of an interdisciplinary treatment team.
88. 170	Provide individual/group and /or crisis counseling for client/family members.
89. 140	Develop family conflict resolution strategies.

APPENDIX E
CURRICULUM ITEMS LISTED BY EDUCATIONAL METHOD

Interactive Lecture

Item#		Item statement
1.	5	Inform family of family dynamics/roles.
2.	80	Inform client about ethical standards and practice
3.	13	Educate client about self-help groups.
4.	195	Educate client about physical and psychological effects of drugs.
5.	15	Process 12-step assignments.
6.	149	Participate in personal and professional development (e.g., review ethics, read current professional literature).
7.	67	Determine DSM- IV classifications.
8.	60	Assess client's family history of addictive disorders.
9.	189	Provide client with education concerning cross addiction.
10.	155	Educate client about different types of addiction (drugs only).
11.	191	Provide client with education concerning anger management.
12.	190	Provide client with education concerning stress management.
13.	76	Clarify family counseling goals.
14.	69	Obtain client medical history.

Collaborative-Interactive Lecture

Item#		Item statement
1.	50	Determine severity of client's substance abuse problem.
2.	83	Establish counseling goals and objectives.
3.	17	Facilitate client exploration of consequences of substance abuse.

Item#		Item statement
4.	85	Assist client in setting short-term and long-term goals.
5.	49	Determine previous/current use of different substances.
6.	29	Identify harmful group behaviors.
7.	25	Counsel significant others concerning substance abuse.
8.	8	Counseling client concerning life style change.
9.	22	Counsel client regarding defense mechanisms.
10.	18	Educate client about consequences of drug abuse.
11.	72	Evaluate need for client referral for treatment.
12.	150	Collaborate with referral systems.
13.	74	Determine necessity for an intervention.
14.	54	Discuss client's reasons for seeking treatment.
15.	33	Determine group counseling effectiveness.
16.	28	Systematically observe group members behaviors.
17.	153	Evaluate treatment outcomes.
18.	140	Develop family conflict resolution strategies.

Supervised Practice

Item#		Item statement
1.	51	Assess client's understanding of his/her substance dependency.
2.	154	Counsel client regarding relapse prevention
3.	73	Assess potential for client to harm self/others.
4.	52	Conduct pretreatment diagnostic interview.

Item#	Item statement
5. 172	Obtain client consent before initiating treatment.
6. 98	Develop a therapeutic relationship with client.
7. 162	Counsel clients with issues related to violence/destruction.
8. 161	Provide counseling to clients with suicidal/homicidal ideation.
9. 42	Assist client's in constructing effective support systems.
10. 130	Use crisis intervention approach/techniques.
11. 3	Administer substance abuse assessments.
12. 99	Utilize different treatment approaches.
13. 176	Evaluate client intake data.
14. 175	Construct comprehensive care/treatment plans, including goals, objectives, strategies, time frame, discharge, and aftercare plan.
15. 103	Assess client's readiness for discharge.
16. 95	Assist client to recognize strengths and weaknesses.
17. 82	Co-construct comprehensive treatment plans.
18. 68	Evaluate client need for further assessment.
19. 102	Re-frame client's problems.
20. 94	Evaluate client's movement toward counseling goals.
21. 93	Implement treatment plans.
22. 167	Provide counseling for the dually-diagnosed client.
23. 157	Assess match between client's needs and program services.
24. 36	Use group-centered group counseling techniques.

Item#		Item statement
25.	179	Provide other resources if not admitted.
26.	173	Conduct mental status examination.
27.	104	Prepare client for termination from counseling.
28.	101	Use cognitive-oriented counseling techniques.
29.	100	Use behavioral-oriented counseling techniques.
30.	96	Assist client in evaluation of progress in treatment.
31.	89	Assess client's strengths and limitations.
32.	66	Evaluate extent of client's psychological dysfunction
33.	65	Use non-test appraisal techniques.
34.	30	Evaluate progress toward treatment goals.
35.	198	Assess biopsychosocial needs, including client's educational, vocational, addictions, psychiatric, sexual, family, and addiction histories.
36.	180	Conduct pretreatment diagnostic interview.
37.	156	Interview client's family and/or significant other(s)
38.	97	Self-evaluate counseling progress.
39.	134	Counsel concerning family change.
40.	87	Observe client for medication side-effects.
41.	177	Determine appropriate level of care accordingto American Society of Addictive Medicine.
42.	174	Complete diagnostic summary, including psychological, physician, and nursing assessments

Item#		Item statement
43.	105	Facilitate client's development of decision-making skills.
44.	86	Function as a member of an interdisciplinary treatment team.
45.	170	Provide individual/group and /or crisis counseling for client/family members.

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BIOGRAPHICAL SKETCH

Born in 1957 in Kentucky, David Whittinghill graduated cum laude from Western Kentucky University with a bachelor's degree in fine art. His works were displayed in many juried exhibitions across the state. He returned to Western Kentucky University to obtain an elementary and secondary teaching certificate and subsequently taught as an art instructor for a number of schools in southern Kentucky.

In 1989, he returned to his alma mater to obtained a master's degree in mental health counseling. During his master's studies, David was mentored and worked with his advisor, Don Dinkmeyer, Jr. Upon completion of his degree, David worked in Bowling Green, Kentucky, in a variety of clinical settings including inpatient and outpatient substance abuse counseling.

In 1994, David was admitted into the doctoral program in the Department of Counselor Education at the University of Florida, where he studied under the tutelage of nationally recognized counselor educators, Larry C. Loesch and Joseph Wittmer. While in the program at the University of Florida, David was awarded the Robert Stripling Scholarship and honored in 1998 by the College of Education as "Outstanding Doctoral Student."

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Larry C. Loesch, Chair
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment for the requirements for the degree of Doctor of Philosophy.

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